



World Overview of Conservation Approaches and Technologies

16th

Share Fair and
International Workshop
and Steering Meeting

*Pretoria, South Africa
27 May - 1 June 2013*

PROCEEDINGS

Progress, Methods, Outputs,
Plan of Action,
Organisation

Co-sponsored by:



**agriculture,
forestry & fisheries**
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REPUBLIC OF SOUTH AFRICA



African Vetiver Network

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Editors

Address

Centre for Development and Environment (CDE)

Rima Mekdaschi Studer, Guillaume Grandchamp and Isabelle Providoli

Centre for Development and Environment (CDE)

University of Bern

Hallerstrasse 10

3012 Bern

Switzerland

Tel. +41 31 631 88 22

Fax +41 31 631 85 44

E-mail: wocat@cde.unibe.ch

<http://www.WOCAT.net>

Layout

Mats Gurtner and Isabelle Providoli



WORLD OVERVIEW OF CONSERVATION APPROACHES AND TECHNOLOGIES (WOCAT)

16th

*SHARE FAIR AND
INTERNATIONAL WORKSHOP
& STEERING MEETING
PROCEEDINGS*

WOCAT Global Management

Centre for Development and Environment (CDE, Switzerland)

ISRIC - World Soil Information (The Netherlands)

Food and Agriculture Organization of the United Nations (FAO, Italy)

LIST OF ABBREVIATIONS

ACSAD	Arab Center for the Studies of Arid Zones and Dry Lands
ADB	Asian Development Bank, Manila, Philippines
AJZ	AJZ: Association des Jeunes de Zammour, Médenine, Tunisia
ARC-ISCW	Institute for Soil, Climate and Water of the Agricultural Research Council, Pretoria, South Africa
BSWM	Bureau of Soils and Water Management, Department of Agriculture, Quezon City, Philippines
CACILM	Central Asian Countries Initiative for Land Management, Bishkek, Kyrgyzstan
CAMP Alatoo	Central Asia Mountain Programme, Bishkek, Kyrgyzstan
CDE	Centre for Development and Environment, University of Bern, Switzerland
CGIAR	Consultative Group on International Agricultural Research, Washington, USA
COST	European Cooperation in Science and Technology
DB	Database
DESIRE	EU-project for Mitigating desertification and remediating degraded land
DoA	Department of Agriculture
DSS/ DST	Decision Support System/ Decision Support Tool
FAO	Food and Agriculture Organisation of the United Nations, Rome, Italy
FAO-LADA	Land Degradation Assessment in Drylands, Rome, Italy
GEF	Global Environmental Facility
GO	Government Organisation
GIZ	Gesellschaft für Internationale Zusammenarbeit,
HIMCAT	Himalayan Conservation Approaches and Technologies
ICARDA	International Centre for Agricultural Research in the Dry Areas, Aleppo, Syria
ICIMOD	International Centre for Integrated Mountain Development, Kathmandu, Nepal
INGO	International Non-Governmental Organisation
ISCO	International Soil Conservation Organization
ISRIC	World Soil Information, Wageningen, The Netherlands
KM	Knowledge Management
LADA	Land Degradation Assessment in Dryland Areas (FAO-UNEP)
LD	Land degradation
LU(S)	Land Use (System)
MoA- Ethiopia	Ministry of Agriculture, Addis Abeba, Ethiopia
MoU	Memorandum of Understanding
NAP	National Action Plan
NGO	Non-Governmental Organisation
NRM	Natural Resource Management
QA	Questionnaire on Approaches
QM	Questionnaire on the WOCAT Map
QT	Questionnaire on Technologies
SDC	Swiss Agency for Development and Cooperation, Bern, Switzerland
SLM	Sustainable Land Management
SLWM	Sustainable Land and Water Management
SSMP	Sustainable Soil Management Programme, Kathmandu, Nepal
SWC	Soil and Water Conservation
TerrAfrica	TerrAfrica – Regional Sustainable Land Management
UNCCD	United Nations Convention to Combat Desertification, Bonn, Germany
UNEP	United Nations Environment Programme, Nairobi, Kenya
WOCATeer	WOCAT collaborator
WOTR	Watershed Organization Trust
WWSM	WOCAT Workshop and Steering Meeting

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FOREWORD & INTRODUCTION

WOCAT (World Overview of Conservation Approaches and Technologies) <http://www.wocat.net> is an established global network of sustainable land management (SLM) specialists, contributing to SLM by sharing and evaluating knowledge. WOCAT's goal is to provide tools and methods for knowledge management and decision support.

Since its initiation in 1992, WOCAT developed standardized methods and tools and a harmonised knowledge management system, which are tested and applied in many countries all over the world. Through the growing WOCAT network and database many SLM experiences were already shared and guidelines for best SLM practices are continuously being developed.

Since 1996, WOCAT has organized International Workshops and Steering Committee Meetings (WWSM) with the goal (a) to bring together the main collaborating and funding, (b) to assess the progress and to exchange experiences, (c) to further develop the programme, (d) to plan for the future and (e) enhance WOCAT in the host country/region. These Workshops were first held annually and since 2009 biannually.

During the previous workshop in Kyrgyzstan in 2011, South Africa offered to host the WOCAT Share Fair and the 16th WOCAT Workshop and Steering Meeting (16th WWSM). The events took place from 27 May to 1 June 2013 at the Arcadia Hotel in Pretoria, South Africa. The 2 day Share Fair (27 to 28 May) was dedicated to the topic of "Innovations in SLM, decision support and up-scaling - at local and national level". It was followed by a one day field trip showing how WOCAT-LADA tools and SLM methods are applied in South Africa with a special session on local mapping. During the following 3 days WOCAT Workshop and Steering Meeting (WWSM) put special focus on:

- Thematically:
 - SLM innovations
 - Innovative tools for SLM KM & DS
 - Success stories on the use of WOCAT-LADA tools
 - Mapping
 - SLM and DRR, watershed management and CC
 - Video as awareness and training tool
- WOCAT international set-up
- Poster market on project and national achievements
- Global progress: end of phase 2008-2011 (evaluation), new phase 2012-2015, consisting of transition phase (2012 – 2013) and consolidation phase (2014 – 2015)
- Vision on the way forward (global, regional and national)
- Steering meeting: expression of intent to join WOCAT International and finalizing the framework agreement

The fair share was attended by 80 participants from 22 countries with 40 participants from the region. The WWSM was attended by 45 participants from 19 countries.

The meeting was organized by WOCAT South Africa under the lead of the Department of Agriculture, Forestry and Fisheries, South Africa, and WOCAT management (CDE, FAO, ISRIC) and Secretariat.

These proceedings have been prepared mainly for the core group of WOCAT collaborators and institutions. This document is not addressed to a broad public and therefore has not been prepared for such a purpose. It is a working document for the further development of WOCAT. Thus some of the issues are presented as reported by the rapporteurs.

A CD-ROM with all major power point presentations and photographs is available at WOCAT Secretariat. The reference to the presentation file is indicated in brackets behind the speaker's name.

WOCAT would like to thank all participants and partner institutions for their contributions and considerable commitment before, during and after the workshop (see attached list of participants).

EXTENDED SUMMARY

WOCAT Share Fair

Day 1: Innovations in SLM, decision support and up-scaling

His Excellency Dr. Nthabiseng Motete, Deputy Director General, Forestry and Natural Resources Management Department of Agriculture, Forestry and Fisheries, South Africa delivered the opening remarks, highlighting the priority need, accomplishments and responsibilities of international organisations, governments, networks, practitioners and land users to secure ecologically sustainable development, with specific reference to the accomplishment within South Africa and the WOCAT network, as a fundamental building block in endeavours addressing global food security and food production.

The Share Fair day was continued with an opening speech by Hanspeter Liniger, WOCAT Secretariat on achievements and challenges using WOCAT for decision support. After that the 1st topic session started on "Innovative SLM technologies and approaches in view of food security, climate change resilience, and disaster risk reduction". The session was opened by a keynote presentation by Professor Mary Scholes, University of Witwatersrand, South Africa on "Climate change and climate smart agriculture". The keynote presentation was followed by various input presentations by countries such as WOTR (India), Helvetas Swiss Intercooperation (Nepal), Grain SA (South Africa), Pedology (South Africa), Self Help Africa, SNNPR Natural Resource and Environmental Protection Authority (Ethiopia), Hydromulch (Pty) Ltd (South Africa), and FAO (Egypt). Each of them highlighted different examples on innovative SLM technologies and approaches.

In the late afternoon a poster market for sponsors, national and regional project, achievements and initiatives took place. Twelve topic posters were presented highlighting various SLM initiatives.

Day 2: A joint way forward in innovations in SLM, decision support and up-scaling

The 2nd day started with the 2nd topic session "Show applications of WOCAT-LADA tools and methods in local, national and global SLM programmes". A keynote presentation was delivered by Hanspeter Liniger, WOCAT Secretariat on "Decision Support for DRR based on watershed planning in Tajikistan". The keynote presentation was followed by several input presentations by countries showing various applications in using the WOCAT-LADA tools such as the University of KwaZulu-Natal (South Africa), North West University (South Africa), FAO, ICIMOD (Nepal), ICARDA (Jordan), GIZ (Kyrgyzstan), State Forestry Administration (PRC, China), OneWorld Sustainable Investments (South Africa), and Western Cape Department of Agriculture (South Africa).

In the afternoon the 3rd topic session on "The development and use of innovative tools for SLM decisions support and knowledge management at local and national level" took place starting with a keynote presentation by Carin Pretorius (CEIT Development, Namibia) on "Mobile and web applications: New possibilities and challenges for the WOCAT network". The keynote presentation was followed by four input presentations illustrating a range of examples and applications of innovative tools such as from Jomo Kenyatta University (Kenya), National Soil Service Centre (Bhutan), AgriSkills (South Africa), WOCAT Secretariat.

The 2nd day of the Share Fair was concluded with the 4th topic session, a success café on "Success stories how WOCAT-LADA tools and methods were used in projects/programmes". Three regional groups (Asia, Africa and North Africa, and South Africa) shared and discussed their success stories and concluded with statements on how to mainstream these successes.

The WOCAT Share Fair was closed by Hanspeter Liniger (WOCAT Secretariat) with several concluding statements and take home messages highlighting the importance of having a joint knowledge management and decision support system.

Field day

A field day showing WOCAT-LADA tools and SLM methods applied in South Africa with a special session on local mapping was organized by WOCAT South Africa.

16th WWSM

The 16th WWSM followed the 2 day WOCAT Share Fair and the Field day. The outcomes of the Share Fair were further developed, progress evaluated and directions for the future of the WOCAT network discussed.

Topic discussion

“Role of SLM in Disaster Risk Reduction (DRR), Watershed Management and Climate Change Adaptation”

A topic discussion was held on the “Role of SLM in Disaster Risk Reduction (DRR), Watershed Management and Climate Change Adaptation”. Three input presentations were delivered each of them highlighting a specific issue. The first one addressed “decision support for DRR based on watershed planning” presented by Hanspeter Liniger (WOCAT Secretariat). The 2nd presentation elaborated on “perceptions on land degradation and conservation, progress with and selected results of the LADA National Assessment Project in South Africa” presented by Lehman Lindeque (WOCAT South Africa). The 3rd presentation proposed “a simplified methodology for systematization of SLM practices for climate change adaptation, based on WOCAT”.

Audio-visual messages from land users to land users and success stories of WOCAT use and how to promote WOCAT-LADA methods and tools further

The session focused on gathering experiences and feedback from participants on the use of video and WOCAT tools in their countries and/or regions. Three groups discussed the i) use of video, ii) an inventory of unique SLM Technologies and Approaches, and iii) ingredients of success stories (successful application, fundraising and up-scaling of WOCAT-LADA tools) and presented their findings.

WOCAT progress (national / global level)

National progress / Poster market

The national progress was presented in the form of a poster market. Each country initiative presented their challenges related to SLM, KM and DS, their achievements since July 2011, in SLM knowledge documentation and WOCAT tool development and training/ networking, and their outlook to the future.

Review global progress and vision

The Global Management, CDE, FAO and ISRIC presented their global progress. Extensive presentations were delivered.

Key achievements by CDE can be summarized as follows:

- End of WOCAT phase 2008 – 2011 (WOCAT external review)
- New phase 2012 – 2015, transition phase (“wind of change”):
 - Main objective: to develop the institutional architecture, management, structure and legal entity to upscale and mainstream WOCAT as the global KM platform for making decisions on SLM investments, locally, nationally, regionally and internationally
- WOCAT participated in various UNCCD events, CRIC 11, CST S-3, UNCCD 2nd Scientific Conference and participated at the two UNCCD calls on “Identification of primary database for UNCCD SLM best practices” and for “Partnering in scientific knowledge brokering for UNCCD implementation”.
- New WOCAT promotion products (e.g. trailer on use of video for SLM knowledge dissemination, 9 movies on SLM in Tajikistan, video trailers on “drought and disaster”, instructional videos for SLM practices).
- Water Harvesting – Guidelines to Good Practice’ (publication date 2013)
- DESIRE overview book
- Various national publications (Tajikistan, China, Bhutan, Nepal 2nd fact sheets)
- WOCAT trainings held in Palestine, Niger, Afghanistan, Mongolia, Tajikistan, Ivory Coast, and Egypt.

Key achievements by FAO can be summarized as follows:

- FAO NRL Land Division team would like to improve and develop more user friendly SLM KM and DS products and tools to support the work of all SLM stakeholders from land users to national decision makers → a global Sustainable Land Management SLM User Needs Survey was prepared and disseminated.
- FAO presented an update on the Global Soil Partnership (GSP) and the new project GEF PPG for development of decision support tools for SLM scaling up and mainstreaming (FAO and WOCAT with 15 countries).

Key achievements by ISRIC can be summarized as follows:

- Comment on Draft Framework Agreement
- Educational activities, PR and acquisition
- Presentations for and enhancing contacts with WUR and other groups

New WOCAT set-up with new defined Steering Committee

The new WOCAT set-up was presented, highlighting WOCAT International, Regional and National. WOCAT International supports innovation and decision-making processes in SLM by building up and coordinating a global network of SLM specialist, by developing standardized tools and methods for KM and DS, by managing a global knowledge base on SLM and by enhancing capacity of involved actors.

WOCAT International will be defined by a Framework Agreement, consisting of a WOCAT Strategy, a WOCAT International Programme, a workplan and a budget. With regional and national WOCAT network members Memorandum of Understandings (MoUs) will be signed a draft of which was presented to the participants.

Steering meeting

For the first time the Steering Meeting was held as a closed session with the future steering committee members. The following institutions attended the event: CDE, FAO, ISRIC, SDC, ASOCON, ICARDA, ICIMOD, South Africa initiative, UNCCD. Not present but interested to attend the Steering Meeting were CIAT, GIZ and Drynet. Keypoints to be discussed were: i) the draft of the Framework Agreement and further changes and adjustments needed, ii) the potential role of the Consortium Partners in the Steering Committee, iii) the possible financial contribution of the various Consortium Partners and iv) the next steps for the finalisation of the Framework Agreement.

Regional WOCAT initiatives

The country and regional WOCAT initiatives meet during the Steering Committee in a parallel session. The first part of the session focused on the discussion of the work plan by countries and regions in groups. The group work was followed by a plenary discussion in which the following key topics were discussed: i) ideas for using the DRR/CCA and watershed tools in your country and region? ii) What are the improvements needed? Costs-benefits / impacts on ecosystem services / others..., iii) What do countries expect from WOCAT International? Which benefits?

Closing of the 16th WWSM

The 16th WWSM was closed by Hanspeter Liniger who summarized the outcomes of the steering committee meeting and Nicole Harari summarized the concerns expressed during the session of the regional initiatives. After some feedback from the participants organisational and administrative issues were discussed.

PROGRAMME

Part 1: WOCAT Share Fair (SF)

Monday 27 May	Innovations in SLM, decision support and up-scaling - at local and national level
08:00 – 09:00	Registration
	<i>Moderator: Lehman Lindeque, WOCAT, South Africa</i>
09:00 – 09:10	Opening statements Lehman Lindeque, WOCAT, South Africa
09:10 – 09:30	Opening address Dr. Nthabiseng Motete, Deputy Director General: Forestry and Natural Resources Management Department of Agriculture, Forestry and Fisheries
09:30 – 10:15	Achievements and challenges using WOCAT for decision support (Hanspeter Liniger, WOCAT Secretariat, Switzerland)
10:15 – 10:45	<i>Morning coffee break</i>
	Topic 1: Innovative SLM technologies and approaches in view of food security, climate change resilience, and disaster risk reduction <i>Chair: Sally Bunning, FAO; rapporteur: Rima Mekdaschi Studer, WOCAT Secretariat</i>
10:45 – 11:15	Keynote presentation 1: Climate change and climate smart agriculture (Prof Mary Scholes, University of Witwatersrand, South Africa)
11:15 – 11:35	Input presentations Systems Crop Intensification and Agro-advisory a way towards Sustainable Agriculture in changing Climate (Sharad Bangade, WOTR, India)
11:35 – 11:55	Riverbed Farming – A Suitable Technology for Poverty Alleviation in the Tarai of Nepal (Gurung Hari, Helvetas Swiss Intercooperation, Nepal)
11:55 – 12:15	An innovative approach to promote Conservation Agriculture in South Africa (Hendrik Smith, Grain SA, South Africa)
12:15 – 12:35	Evaluation of soil conservation measures on highly erodible soils in the south-eastern Free State Province, South Africa (Garry Patterson, Pedology, South Africa)
12:35 – 13:00	<i>Key issues to topic 1 and discussion.</i>
13:00 – 14:00	<i>Lunch break and group photo</i>
14:00 – 14:20	Striking a balance: Sustainable Wetland Management & the Functional Landscape Approach with Policy Briefing Notes (Pietro Chiappini Carpena, Self Help Africa, Great Britain)
14:20 – 14:40	Kebele parcel based participatory land use planning approach is an Integrated solution to Land degradation problems in Ethiopia (Frehiwot Desta Jagre, SNNPR Natural Resource and Environmental Protection Authority, Ethiopia)
14:40 – 15:00	Poverty alleviation program utilizing local communities for environmental restoration: Case studies from Madagascar and Limpopo Province in South Africa (Roley Noffke, Hydromulch (Pty) Ltd, South Africa)
15:00 – 15:20	Participatory Three Dimensional Modelling for Sustainable Resource Planning and Climate Change Adaptation: Development, Progress, and Opportunity in Rural India (Girish Jathar, WOTR, India)
15:20 – 15:30	<i>Key issues to topic 1 and discussion.</i>
15:30 – 16:00	<i>Afternoon coffee break</i>

16:00 – 16:30	Land tenure planning and management in the NE region (Daniel Danano, FAO RNE, Egypt)
16:00 – 17:30	Poster market and booth exhibition for sponsors, national and regional projects, achievements and initiatives
<i>Evening</i>	<i>Welcome drinks / dinner in same area of exhibition booths and posters</i>
<hr/>	
Tuesday 28 May	A joint way forward in innovations in SLM, decision support and up-scaling
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	<i>Moderator: Lehman Lindeque, WOCAT, South Africa</i>
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08:30 – 08:45	Opening remarks, logistic arrangements by conference organizers Information on video statements of successes using WOCAT by countries (Nicole Harari)
<hr/>	
	Topic 2: Show applications of WOCAT-LADA tools and methods in local, national and global SLM programmes.
	<i>Chair: Godert Van Lynden, ISRIC; rapporteur: Rima Mekdaschi Studer, WOCAT Secretariat</i>
08:45 – 09:15	Keynote presentation 2: Decision Support for DRR based on watershed planning in Tajikistan (Hanspeter Liniger, WOCAT Secretariat, Switzerland)
09:15 – 09:35	Input presentations Erosion, rehabilitation and land management in dispersive soils in eastern South Africa (Heinz Beckendal, University of KwaZulu-Natal, South Africa)
09:35 – 09:55	Role of WOCAT in UNCCD: potentials and constraints in South Africa (Klaus Kellner, North West University, South Africa)
09:55 – 10:15	Role of WOCAT tools in regional/national programmes to support SLM planning and decision making: experiences by FAO (Sally Bunning, FAO, Italy)
<hr/>	
10:15 – 10:45	<i>Morning coffee break</i>
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10:45 – 11:05	Application of WOCAT tools (QT,QA and modules) in ICIMOD'S regional programmes (Madhav Dhakal, ICIMOD, Nepal)
11:05 – 11:25	Similarity and suitability analysis to assist the out-scaling of SLM at national and regional levels in West Asia and North Africa (Feras Ziadat, Mohammed Karrou, Theib Oweis, Tarek Kandakji, ICARDA, Amman, Jordan)
11:25 – 11:45	GIZ activities in Central Asia in the sphere of sustainable natural resources management in view of food security, climate change resilience and disaster risk reduction (Natalia Mitiakova, GIZ, Kyrgyzstan)
11:45 – 12:05	Best Practices for Sustainable Land Management in Dryland Areas of China (Zengming Song, State Forestry Administration, PRC, China)
12:05 – 12:25	Experiences of the Application of WOCAT Tools for the Assessment of Climate Resilient Livelihood Options in Drought Prone Areas of Southern Mozambique (Simon Croxton, OneWorld Sustainable Investments, South Africa)
12:25 – 12:45	The Berg River Project: powering the Green Economy (Francis Steyn, Western Cape Department of Agriculture, South Africa)
12:45 – 13:00	<i>Key issues to topic 2 and discussion.</i>
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13:00 – 14:00	<i>Lunch break</i>

	Topic 3: The development and use of innovative tools for SLM decisions support and knowledge management at local and national level. <i>Chair: Garry Patterson, Agricultural Research Council, South; rapporteur: Janie Rioux, FAO</i>
14:00 – 14:30	Keynote presentation 3: <i>Mobile and web applications: New possibilities and challenges for the WOCAT network (Carin Pretorius, CEIT Development, Namibia)</i>
14:30 – 14:50	Input presentations Development of a decision support tool for selecting sustainable land management technologies in the upper Tana basin (Paul Kahiga, Jomo Kenyatta University, Kenya)
14:50 – 15:10	Present the development of innovative tools for SLM decisions support and knowledge management at local and national level (Tashi Wangdi, National Soil Services Centre, Bhutan)
15:10 – 15:30	Action learning and role-play: An innovative option for training rural communities in Sustainable Land Management. (Danie Steyn, AgriSkills, South Africa)
15:30 – 15:50	Audio-visual messages from land users to land users (Nicole Harari, WOCAT Secretariat, Switzerland)
15:50 – 16:00	<i>Key issues to topic 3 and discussion.</i>
16:00 – 16:15	<i>Coffee break</i>
16:15 – 17:15	Topic 4: Success café - Group work on success stories how WOCAT-LADA tools and methods were used in projects/programmes
17:15 – 18:00	Synthesis and plenary discussion of topic 1 to 4
18:00 – 18:15	Closing

Part 2: Field day (1 day), Wednesday, 29 May

A field day showing WOCAT-LADA tools and SLM methods applied in South Africa with a special session on local mapping will be organized by WOCAT South Africa.

Date/time	Activity / topic
Wednesday 29 May	Field day
08:00 – 09:00	Travel to Mooiplaas Farm Busses depart 08:00 from the front of the Arcadia Hotel (1 hour travel time)
09:00 – 10:00	Introductory session on WOCAT QM Mapping General introduction and welcoming by farmer Open plenum discussion and instructions Divide into small groups for field work
10:00 – 11:00	Group fieldwork Developing a Base Map for assessment and identifying Mapping Units Do a very brief assessment on part of Mooiplaas farm
11:00 – 12:00	Feedback session and general discussion Feedback and discussion on mapping exercise Discuss links of mapping information with QT and QA General discussion and demonstration of using WOCAT Tools for informed decision making and differences between different scales of assessment
12:00 – 13:00	Travel to Ukuvuna Optimized Sustainable Projects (45 Minutes travelling time)
13:00 – 14:00	Lunch at Ukuvuna premises in Midrand
14:00 – 15:00	Introduction to permaculture and urban agriculture John Nzira (Director: Ukuvuna Optimised Sustainable Projects)
15:00 – 16:00	Eco garden tour Permaculture design layout demonstrating the successful integration of various components, such as water management, soil management, renewable energy, waste management, agronomy, revolving plant propagation, herbs and medicinal plants, horticulture, apiculture, small livestock, food processing and much more...
16:00 – 17:00	Group discussion Discuss permaculture concepts and principles, SLM Training issues and link to WOCAT tools (QT and QA)
17:00 – 18:00	Travel back to Arcadia Hotel (1 Hour travelling time)

Part 3: 16th WOCAT Workshop and Steering Meeting (16th WWSM)

Date/time	Activity / topic	Responsibilities
Thursday 30 May	OPENING / TOPIC DISCUSSIONS	Chair: Lehman Lindeque Rapp.: Rima Mekdaschi Studer
8:30 – 09:15	Welcome and introduction Participants expectations, approval of agenda	Hanspeter Liniger, Lehman Lindeque
09:15 – 10:00	Summary of Share Fair and reflections on field day Short input to topic 1 to 4 of Share Fair Open plenum discussion / reflection on Share Fair and field day General feedback/ impressions of WWSM participants	3 SF topic chairs and Hanspeter Liniger
10:00 – 10:30	Update on new WOCAT set-up with new defined Steering Committee and link to other large scale programmes (UNCCD, GEF, WB, etc.)	Isabelle Providoli,
10:30 – 11:00	<i>Coffee Break</i>	
	TOPIC DISCUSSION	
11:00 – 13:00	Role of SLM in Disaster Risk Reduction (DRR), Watershed Management and Climate Change Adaptation - Decision support for DRR based on watershed planning - Decision support based on mapping	Hanspeter Liniger, Lehman Lindeque, Janie Rioux
13:00 – 14:00	<i>Lunch</i>	
14:00 – 14:45	Role of SLM in Disaster Risk Reduction (DRR), Watershed Management and Climate Change Adaptation continued - Adaptation of WOCAT tools and methods to evaluate climate resilience, example from Chile (FAO)	
14:45 – 17:30 <i>Coffee break during group work</i>	Audio-visual messages from land users to land users: use of videos to document SLM practices Success stories of WOCAT use and how to promote WOCAT-LADA methods and tools further - Ingredients of successful application of WOCAT-LADA tools in projects - Ingredients of successful fundraising - Up-scaling successes, concrete steps in using WOCAT-LADA tools	Nicole Harari, Hanspeter Liniger
18:15 – 22:30	Busses depart from Arcadia Hotel to Hydromulch premises in Bapsfontein for conference dinner (barbeque) Evening sponsored by Hydromulch, the International Erosion Control Association, University of KwaZulu-Natal and the African Vetiver Network	
Friday 31 May	WOCAT PROGRESS (GLOBAL/NATIONAL LEVEL)	Chair: Godert Van Lynden Rapp.: Isabelle Providoli
08:30 – 10:30	National progress / Poster market (Use standardised template for poster) Share experiences in applying WOCAT-LADA and related tools in local, national and global SLM programmes (UNCCD, GEF projects (e.g. LADA-WOCAT), WB projects, GGWI, bilateral projects, etc.) New demands, problems, gaps & development by WOCAT members identified	Rima Mekdaschi Studer, Isabelle Providoli

10:30 – 11:00	Coffee Break	
11:00 – 12:00	National progress / Poster market cont. (Use standardized template for poster)	Rima Mekdaschi Studer, Isabelle Providoli
12:00 – 13:00	Review global progress and vision (plenary presentation) - WOCAT Secretariat/CDE	Rima Mekdaschi Studer, Hanspeter Liniger
13:00 – 14:00	Lunch	
14:00 – 15:40	Review global progress and vision (plenary presentation) continued - FAO - Results of SLM survey monkey - ISRIC	Sally Bunning, Janie Rioux, Godert Van Lynden
15:40 – 16:00	Coffee Break	
16:00 – 16:45	Further discussion on new WOCAT set-up with new defined Steering Committee and link to other large scale programmes (UNCCD, GEF, WB, etc.) - Framework Agreement - MoUs with countries	Isabelle Providoli, Hanspeter Liniger
16:45 – 17:00	Evaluation of the WOCAT events	Isabelle Providoli, Rima Mekdaschi Studer
17:00 – 18:00	Future planning by WOCAT country initiatives, partners and members Regional/bilateral synergies and joint efforts	Hanspeter Liniger, Nicole Harari

Saturday 1
June
PARALLEL SESSIONS:
1. STEERING MEETING
2. REGIONAL WOCAT INITIATIVES

1. STEERING MEETING (new: closed session for steering committee members)		
08:30 – 12:30 <i>Including coffee break</i>	<ol style="list-style-type: none"> 1. Strengths, impact, usage and strategy of WOCAT 2. Annual report and financial accounting and future outlook (WOCAT Global level and Secretariat) 3. Presentation of new institutional framework 4. Presentation of potential Steering Committee Partners 5. Consolidation of partner inputs and implications for the next phase 6. Organisational and administrative issues: 7. AOB 	Hanspeter Liniger, Isabelle Providoli, Rima Mekdaschi Studer
2. STEERING MEETING (Session for all WWSM participants)		
08:30 – 12:30 <i>Including coffee break</i>	<ol style="list-style-type: none"> 1. Planning of regional activities and initiatives 2. Promote WOCAT and the expansion of the WOCAT network within the country, and to other countries and regions 3. Elaborate concrete funding opportunities and proposals 	Nicole Harari, Janie Rioux
12:30 – 13:00	Closing of 16 th WWSM	
13:00 – 14:00	Lunch	
14:00 onwards	Departure of participants	

1 WOCAT SHARE FAIR

Innovations in SLM, decision support and up-scaling - at local and national level

Moderator: Lehman Lindeque, WOCAT, South Africa

Opening statement

Lehman Lindeque, WOCAT, South Africa

'On behalf of the WOCAT Secretariat and WOCAT South Africa, a warm welcome to each and everyone here!

It's almost two years since our previous WOCAT Share Fair, Workshop and Steering Meeting in Kyrgyzstan and it is a pleasure to host you in South Africa. We hope you enjoy your brief visit to our beautiful country.

You might be an old WOCATEER, or ancient, of which we have a few individuals, or you might be new to the WOCAT Scene, it is our wish this Share Fair contribute both personally and professionally to your growth and development.

Without our sponsors this WOCAT Share Fair would not have been possible, thank you very much for your generous contributions. A special of word of thanks to WOCAT Management, Swiss Agency for Development and Cooperation (SDC) and their partners, DAFF in South Africa, Hydromulch, The International Erosion Control Association, Region 2 and the University of KwaZulu Natal.

Dr. Motete, Deputy Director General: Forestry and Natural Resources Management from the Department of Agriculture, Forestry and Fisheries in Pretoria will formally open this WOCAT Share Fair.'



Opening address

*Dr. Nthabiseng Motete, Deputy Director General: Forestry and Natural Resources Management
Department of Agriculture, Forestry and Fisheries (DAFF)*

Dr. Nthabiseng Motete welcomed all participants and delivered the opening address, on behalf of the Minister of the Department of Agriculture, Forestry and Fisheries in South Africa who unfortunately was unable to attend due to the Budget Vote address in Parliament.

She highlighted the priority need, accomplishments and responsibilities of international organisations, governments, networks, practitioners and land users to secure ecologically sustainable development, with specific reference to the accomplishment within South Africa and the WOCAT network, as a fundamental building block in endeavours addressing global food security and food production. She expressed a word of sincere appreciating towards the WOCAT network, management team and sponsors for continuous development, adaptation and refinement of the WOCAT database and toolbox. She also announced that LandCare South Africa formally adopted the local level land degradation assessment and sustainable management tools, as refined during the LADA project, as standard operating procedures.



She proposed that the impact achieved by the cellular phone industry, in the case of South Africa from 6 thousand users in 1990 to 59 million users in 2011, be used as a benchmark in order to challenge our creative thinking in developing approaches and technologies that will achieve the same level of impact on land users, in practicing custodianship and caretakers of their and our fragile natural resources.

Dr. Motete conveyed the Minister's best wishes to all participants during their stay in South Africa.

Achievements and challenges using WOCAT for decision support

Hanspeter Liniger, WOCAT Secretariat, Switzerland

The aim of this presentation was to give an overview of the WOCAT network, its mission and vision, tools and products as well as current challenges and actions.

When it comes to land degradation the global community has applied a problem-centred focus for far too long. To achieve results and to impede the further spread of land degradation it is time to shift the focus towards a solution-centred one with sustainable land management (SLM) at the forefront. However, financing for SLM to fight land degradation by the Global Environmental Facility (GEF) and other donors has little weight compared to financial resources spent for biodiversity conservation and climate change. As plenty of good practices have been applied in projects and by innovative land users, the main challenge today is the one of managing and sharing this widespread knowledge for improved decision support. This leads to WOCAT's vision of one joint knowledge management (KM) and decision support system (DSS) to support up-scaling of SLM around the globe.



WOCAT is a global network of specialists working in the field of Sustainable Land Management (SLM) including over 60 institutions worldwide. It supports innovation and decision-making in SLM by developing and providing standardized tools and methods for documenting SLM knowledge at the field level, providing capacity building and a global knowledge database. This on-line and open access global knowledge base already includes more than 470 SLM technologies and 230 approaches from 50 countries worldwide. With this wealth of SLM data several books synthesizing SLM experiences at the global, regional and national level have been produced. They provide principles, guidelines and policy points for selecting and implementing SLM practices in a standardized format. The newest WOCAT product (published in 2013) focuses entirely on a group of best practices for Water Harvesting around the globe.

Furthermore WOCAT provides an approach and tools for decision support developed jointly with partners within the DESIRE and LADA projects. The DESIRE decision support workshops provide stakeholders with an approach to identify, assess and select SLM technologies for implementation. The SLM mapping tools and database allow for the planning of up-scaling and spreading SLM and assessing its impact. The development of new tools responding to urgent needs is also key to WOCAT. The most recent example is the WOCAT climate change module to assess the resilience and adaptation of SLM technologies to climate change. WOCAT continues to be applied in large research projects as currently within the EU-CASCADE, RECARE and the BMBF project (Germany).

The main future challenges remain the following:

- The WOCAT-LADA tools should be mainstreamed within all SLM projects worldwide. This needs awareness raising for the allocation of funds to knowledge management. It requires adapting tools to the needs of different users, rendering documentation easier and improving data access e.g. through the development of applications for mobile phones etc.
- The WOCAT knowledge management and decision support system should be accredited by UNCCD, GEF, WB, IFAD, UNEP, UNDP, GIZ etc. as their main knowledge management system for SLM.
- Benefits of SLM have to be proven through the quantification of on-and off-site impacts of SLM from local to global levels. The use and impact of WOCAT needs to be assessed through the assembling of success stories, showing increased efficiency of projects, the money saved through improved knowledge management and the tracking of land users supported. New audio-visual products need to be created to transfer the benefits of SLM and knowledge management / decision support from land user to land user.

Topic 1: Innovative SLM technologies and approaches in view of food security, climate change resilience, and disaster risk reduction

Chair: Sally Bunning, FAO; Rapporteur: Rima Mekdaschi Studer, WOCAT Secretariat

Keynote presentation 1: Climate change and climate smart agriculture

Prof Mary Scholes, University of Witwatersrand, South Africa

If trends in human diet and waste in food systems remain unchecked, food production would have to increase by about 70% to feed an estimated 9 B people by 2050 with unprecedented consequences for the environment and society. The food price spikes of recent years have reinforced awareness of obvious links between political and economic stability and food security. As a consequence, agricultural development is now the focus of renewed attention from both the research and policy communities. In describing tensions between maximizing global agricultural productivity, increasing resilience of agricultural systems in the face of climate change, and mitigating greenhouse gas (GHG) emissions from agriculture, the term “climate-smart agriculture” (CSA) made its first public appearance in late 2010 at the 1st Global Conference on Agriculture, Food Security and Climate Change at the Hague. CSA was then defined as agriculture that “sustainably increases productivity, enhances resilience, reduces/removes greenhouse gas emissions, and enhances achievement of national food security and development goals.” This definition represented an attempt to set a global agenda for investments in agricultural research and innovation, joining the agriculture, development and climate change communities under a common brand. The concept of the safe space for food security was presented as discussed. Five areas for investment were also presented which included: Sustainable intensification & forest governance, Sustainable land management (SLM) practices, Alternate wetting and drying systems in irrigated rice, improved nitrogen use efficiency and Increased intensity of ruminant production in Africa to reduce greenhouse gas emissions per unit of product. Climate smart agriculture must take into account: food security and adaptation and ecological footprints, through development and smallholder concerns as well as the critical areas of trade-offs. A range of analyses and tools are needed to enhance choices, options, and investments. Knowledge products are also needed to advance action, especially at farmer, district and national levels. Coherent messaging and dialogues are essential if we are to reach a food secure world.

Inputs presentations topic 1

Systems Crop Intensification and Agro-advisory a way towards Sustainable Agriculture in changing Climate

Sharad Bangade, WOTR, India

Improving agriculture productivity has been a key intervention of WOTR since the inception of development and management of watersheds. It has been observed that no matter how much of technology inputs and new techniques of productivity enhancement in agriculture are shared with the farmers – issues of decreasing crop yields and increasing inputs costs continue to exist.

Among various externalities that influence the decisions of resource poor farmers, the key problem in context to productivity and profitable agriculture, is the increasing crop density per acre over time making it a highly unsustainable livelihood option.

In order to overcome this we propose a new method "System of CropIntensification (SCI)". The technique involves four pronged approach namely, Soil preparation and management, Crop Geometry, Systematic Application of Organic inputs and Micro-nutrient foliar spray and basal applications. The field trials suggest that the method is beneficial to variety of vegetable crops, sunflower, maize, millets, paddy, wheat and pulses. The key observations are Increase crop yields, Increased crop residue used for fodder specially in paddy, wheat and ground nut, Increased fuel wood in the case of pulse crops specially red gram, high quality produce, uniformity in produce, lesser inputs costs – no pesticides, chemical fertilizers reduced to need based usage of micronutrient sprays and basal application, reduced labour costs, lesser weed problems, farmer could get good crop even without assured number of irrigations which is a problem in dry regions, the plants did not shrivel up due to sudden temperature fluctuations specially in vegetables

However, this needs technological assistance. To reduce the climatic risks and improve agriculture productivity, WOTR has launched a knowledge-embedded service to farmers in Maharashtra (India) that provides crop and locale specific agro-advisories based on 3-day weather forecasts and crop growth stage. Advisories focus on environmentally friendly integrated solutions that are within the farmers' capabilities. A database of crop specific information, major pest and disease incidences under specific

weather conditions, cultural practices of controlling pest and diseases, general agri-management practices, and crop calendars provides back-end support. This service is provided to the farmers free of cost.

The amalgamation of SCI and agro-advisory model is being tried with farmers of Maharashtra. Such integration of technology and scientific intervention to enhance crop production is key to sustainable agriculture in changing climate.

Riverbed Farming – A Suitable Technology for Poverty Alleviation in the Tarai of Nepal

Gurung Hari, Juerg Merz, Helvetas Swiss Intercooperation, Nepal

Land resources are scarce in the Tarai, but a land resource that has not been used in the past, or only to a minute extent, is dry riverbeds. As rivers leave the narrow valleys of the hills and enter the plains they spread out covering large tracks of land. As the speed of water flow reduces, silt is deposited in large quantities. During the dry season the water retreats and dry riverbeds remain between October and May. There are an estimated 80000 hectares of riverbeds and banks in the Tarai. These dry riverbeds can be used by landless and land poor households, about 20 per cent of the population in the Tarai, to cultivate vegetables. They have been used in the past for agriculture and horticulture by a small community settling temporarily along rivers and cultivating vegetables. Yet the potential for riverbed farming is still very significant. Appropriate cultivation techniques will allow households to sell fresh produce in the market at a time when supply of vegetables from regional agriculture is low. This will enable them to generate an income lifting them well above the poverty line.

With the goal to increase income, nutrition and livelihoods of landless, land poor and flood affected people, HELVETAS Swiss Intercooperation has initiated a Riverbed Farming Project in six districts. Primary stakeholders residing around potential riverbed areas are organized into farming groups. Appropriate riverbeds containing fine sand with adequate moisture level are selected and land lease agreements with the land owners are made. The vegetables, mostly cucurbits, are planted considering the soils and the moisture of the prepared plots. For improved crop productivity and to reduce the impact on the river ecology, the use of improved organic fertilizers and bio-pesticides is promoted. In the first year, the costs for the agricultural inputs are supported by the project, then gradually managed by the primary stakeholders themselves. Farmer-to-farmer extension including market linkage is facilitated by local resource persons throughout the cropping season.

This paper will introduce the technology and approach of riverbed farming, which has shown to be effective in increasing household income and in supporting improved food security of the participating 3,000 households. It has further shown to minimize sand extraction, free range grazing, river bank erosion and supported regeneration of vegetation on the river banks. Following these experiences, the Ministry of Federal Affairs and Local Development has led the drafting of a riverbed farming promotion policy.



Input presentations delivered by Sharad Bangade, Gurung Hari and Hendrik Smith (Photos: WOCAT Secretariat).

An innovative approach to promote Conservation Agriculture in South Africa

Hendrik Smith, Grain SA, South Africa

Goal

Various institutions, such as the Agricultural Research Council (ARC) and Grain SA, have been involved in the promotion of Conservation Agriculture (CA) in South Africa during the last decade. The situations encountered within the areas in need of intervention have been complex and required an innovative approach of research and development. The goal of this article is to describe this 'new' paradigm and approach introducing a 'family of methodologies' that would assist to investigate, develop and integrate CA principles and practices with farmers.

Methodology

The *constructivist* paradigm was used, allowing practitioners to become part of the target group in constructing their own reality and agreeing on their reasons for collective action. This has alerted researchers to the now growing family of *Innovation Systems (IS)* methodologies. IS were progressively applied and tested during fifteen years of CA promotion in South Africa, supported by a range of complementary methodologies, of which action research, Farmer Field Schools and social learning were the most prominent.

Findings

Around 2001, *action research* was adopted as the 'umbrella' methodology. The main role of the action researcher emerged to be a *facilitator* of the innovation process. In 2006 an IS model was developed aiming to create a culture of learning that would allow people to be innovative and interactive aiming to manage natural resources in a sustainable manner. This model has been applied to many situations across South Africa, of which most are aiming to promote CA; it is continuously improved and adapted, strengthening *Innovation Systems*, supported by various complimentary methodologies, as the new preferred approach. *On-farm, farmer-led experimentation* are the main type of IS methodologies being introduced, supported by *social learning*, which involves a large group of 25 people divided into smaller groups of five people each.

Conclusion

There is now increasing understanding that promotion of CA does not follow a linear process. An IS perspective to development reveals that the actual change and learning processes are much more complex and diverse. Funding mechanisms must be designed in such a way that they contribute to strengthening partnerships and other learning alliances, and become vehicles for attracting funding from both public and private sources who wish to adapt, develop, or adopt IS on topics and issues focused on CA.

Evaluation of soil conservation measures on highly erodible soils in the south-eastern Free State Province, South Africa

Garry Patterson, Pedology, South Africa

Soil erosion by water is a serious problem in many parts of South Africa, where it is exacerbated by poor land use practices and erodible soils. Several potential methods are available to address the problem and a field trial was conducted near Ladybrand over four seasons, on an erodible, duplex soil. Various geotextiles and low-cost physical measures were evaluated over four rainfall seasons (2008-2012) for their effectiveness in reducing runoff and sediment load as well as promoting re-vegetation. The treatments included two types of jute matting, a synthetic geotextile, woven palm mats, micro-basins (with and without indigenous shrubs), surface stone rows and bare soil as control. Runoff was recorded by datalogger connected to tipping buckets, with sediment load sampled after each significant rainfall event.

All the treatments performed markedly better compared to the bare soil, but there were several variations, both between seasons and between the treatments. Rainfall also varied from season to season. For the treatments applied, runoff averaged 37% to 62% of the bare soil, while sediment load averaged 18% to 84%. Re-vegetation was generally more than twice that of the bare plot. Approximation of the effect on soil loss showed reduction from an annual rate of between 21 and 52 t ha⁻¹ to between 1 and 7 t ha⁻¹ for most of the treatments. While many land users or communities may not be able to obtain or afford the geotextiles, the more basic treatments, requiring a lower level of inputs, are available as an effective means of addressing this problem of excessive soil loss. The results of the trial provide evidence of how effective these treatments might be in such susceptible environments.

Striking a balance: Sustainable Wetland Management & the Functional Landscape Approach with Policy Briefing Notes

Pietro Chiappini Carpena, Self Help Africa, Great Britain

Goal

Improved wetland based livelihoods while conserving natural resources.

Methods

The 'Functional Landscape Approach' (FLA) is a multidisciplinary management method, developed by Wetland Action, which integrates conservation and development objectives in wetlands and their surrounding catchments. Using the guiding principles of FLA, Self Help Africa has been playing an 'innovation intermediary' role in offering a coordinated and community-based way of addressing the environmental, livelihood and social issues being faced by smallholder farmers using permanent and seasonal wetlands in Ethiopia and in Southern Africa (Malawi and Zambia). FLA is underpinned by three concepts:

- Functional landscapes - understanding the socio-economic and environmental interconnections between catchments and wetlands in terms of water infiltration and storage, as well as the prevention of soil erosion;
- Local institutional development - facilitate development of institutions, such as Village Natural Resource Management Committees, to coordinate participatory and sustainable land management plans to maximize social, economic and ecological benefits;
- Adding value and striking a balance - encouraging communities to balance viable food production and income generation from wetlands, with conservation measures to maintain ecosystem services.
- The time frame for implementing the FLA is two weeks for consultation and analysis and several years for applying land management measures, including conservation agriculture; agroforestry; soil and water conservation; wetland use planning; efficient water use; and soil protection, with monitoring and adjustment to maximise benefits.

Findings

The considerable emphasis on coaching land and water management practices through the landscape or ecological units of which the wetlands are a part, illustrates the value of an integrated view of people within their wetland and broader landscape in designing interventions.

Through investments in upland soil and water management, SHA registered increased water availability to irrigate crops in the wetlands during the drier months. The project's success in raising the water table underwrote the significantly increased food production and the resulting improvements in household income, food security and health.

The acquisition of new skills, social organization and, above all, the emergence of individual and collective belief in the ability to effect change also emerged as fundamental conditions for economic, social and political growth linked to wetland-based contributions to poverty reduction.

Conclusions

Livelihood development in wetlands is only a part of a broader suite of investments covering several situational attributes (biophysical, economic, institutional, cultural, etc.) required for sustainable local resource use. The significant results exhibited with respect to both wetland conservation and poverty reduction owes much to FLAs multidisciplinary approach to problem analysis.



Input presentations delivered by Pietro Chiappini, Roley Noffke and Daniel Danano (Photos: WOCAT Secretariat).

Kebele parcel based participatory land use planning approach is an Integrated solution to Land degradation problems in Ethiopia

Frehiwot Desta Jagre, SNNPR Natural Resource and Environmental Protection Authority, Ethiopia

Kebele based participatory Land use planning is a new SLM approach where the grass root community with assistance from SLM specialists recommend and Implement different WOCAT-SLM technologies for different slope and capability class lands. Moreover, the grass root community through their 25 kebele representatives control and regulate Inappropriate Land use practices which contribute to Land degradation.

Goal

To improve food security situation of the local community by establishing sustainable Land use and management system.

The recommended SLM technologies are expected to Improve soil fertility, water harvesting situation, income generation and there by improve poverty situation.

Methods and procedures

The approach uses the following methods and procedures:

- Training local staff and community representatives
- Organizing the local community to prepare proper land use plan and there by to fight land degradation
- Preparation of local by laws
- Preparation of bio-physical and socio-economics data's
- Identification of Inappropriate land use practices that contribute to land degradation.
- Recommendation of different SLM technologies for different land uses and capability classes
- Preparation and approval of Kebele Lands use plan
- Cascading kebele level land use plan to individual parcels.
- Implementation, control and regulation.

Findings

The current approach is a new one for the area and it is started last year in amhara region and it is started in SNNPR Region this year following the training given to local grass root staff. How ever, the recommended SLM technologies in the area of water harvesting, soil conservation and productivity enhancement will definitely give good results in near future and we will communicate the results.

Conclusion

Kebele parcel based local level land use planning believed to be an effective approach which combines Planning, Implementation and regulatory Issues together to tackle Land degradation problems In Ethiopia. The approach is now at its initial pilot phase the training for local staff has been given in SNNPR and AMHARA Region and the manual tested at some Community level and promising responses have been already recorded. After testing this year it is planned to be extrapolated to all districts of the region.

Poverty alleviation program utilizing local communities for environmental restoration: Case studies from Madagascar and Limpopo Province in South Africa

Roley Noffke, Hydromulch (Pty) Ltd, South Africa

Madagascar

The erosion control and environmental restoration requirements on the RIO TINTO/QMM Ilminite project initiated a poverty alleviation program for many local communities in and around the town of Fort Dauphin, Madagascar.

Extensive work was required for coastal dune rehabilitation, erosion control and slope stabilization along the newly constructed roads from the new harbour, the quarry haul road, MSP mining site and the 3 villages that were to be constructed to accommodate the mining staff.

HYDROMULCH (Pty) Ltd in conjunction with RIO TINTO/QMM Environmental embarked on a poverty alleviation program utilising members of the local community surrounding the project. These communities were involved in the propagation and supply of Vetiver plants at their respective villages, where entire families participated jointly in these programs.

All planting & propagation material as well as consumables were supplied to assist the poverty stricken communities in the growing of 4,000,000 Vetiver plants,

The villagers were trained in basic skills, soil conservation, and micro-financial management and propagation techniques by the on-site HYDROMULCH staff.

The poverty alleviation concept was extended to the Rio Tinto Simandou Exploration project in Guinea as well as the Sherritt Mining Ambatovy Nickel Pipeline project in Madagascar.

Limpopo Province in South Africa

The International Erosion Control Association (IECA) in association with the Vetiver Network International (TVNI) and Hydromulch (Pty) Ltd, a South African environmental restoration company operating throughout Africa and internationally embarked on a number of donga rehabilitation programs with the Department of Agriculture, Limpopo Province, South Africa utilising local communities in rural areas of the Limpopo Province, South Africa.

Training on and off site was provided by Hydromulch under the auspices of the IECA & TVNI to communities in the Limpopo Province for 3 separate communities, namely Tubatse Village, Malomanye Village and Moutse Village.

The training provided technical and well as practical aspects of donga rehabilitation with emphases placed on side slope preparation, propagation, planting and maintenance techniques using *Chrysopogon zizanioides* (vetiver grass).

Vetiver grass is considered a climax plant surviving in various environments, which has unique physiological & ecological characteristics, namely:

- Tolerance to low pH and Manganese and Aluminium toxicity
- High saline tolerance
- Alkaline and heavy metal toxicity tolerance
- Varying temperatures between -10°C and 55°C
- Strong capacity for photosynthesis, resulting in quick growth
- Varying moisture conditions – 200mm to 5,000mm
- Ability to grow on varying soil conditions – clayey red soils, shifting sands, sandy soils with clay, strong acid soils (pH 3) and extremely alkaline soils (pH 11) and infertile soils.

The objective of using the local communities for these programs was to explore ways of job creation and poverty alleviation. They would be trained in propagation techniques, the correct planting procedures and how to maintain the vegetated areas. The phytoremediation properties of Vetiver grass was also explained to the communities who were encouraged to plant vetiver around their vegetable crops (pest management) as well as at the outfall of pit latrines to reduce pollutants contaminating wetlands and river courses.

All consumables (fertiliser, organics), plant material (Vetiver slips), loose tools (spades, garden forks, rakes, watering cans, wheel barrows) and other incidentals, were supplied to the communities who were trained over a two to three day period.

The field work training carried out on site demonstrated the correct techniques for laying out contours, soil preparation of plant holes, planting and maintenance.

An emphasis was also placed on how to approach donga rehabilitation holistically identifying the potential source of the problem, diverting storm water runoff, construction of rock berms and the planting of Vetiver grass hedge rows

Participatory Three Dimensional Modelling for Sustainable Resource Planning and Climate Change Adaptation: Development, Progress, and Opportunity in Rural India

Girish Jathar, WOTR, India

The Participatory 3-Dimensional Modeling poses substantial enhancement potential to increasing stakeholder participation in the Watershed Organization Trust's (WOTR) Climate Change Adaptation Programme (CCA). As a comprehensive, technical and educational tool for environmental decision-making at the grassroots level, P3DM surpasses other Participatory Geographic Information Systems methods for rural development. This is because it provides local communities with a hands-on experience that produces both a real model that villages can use in manifold ways, but also digitized maps representing indigenous spatial knowledge that can be used at organizational, governmental, or academic levels.

Specifically for WOTR, P3DM presents an important avenue of communication between government and village communities that has historically been blocked by institutional hierarchies and sociopolitical inequities. It brings village voices to the policymaking table. However, perhaps more importantly, village communities feel more connected to development interventions in the creation of a P3DM, and the process is conducive to increased community cohesion and confidence by way of indigenous knowledge exchange.

P3DM can be used as a supplement to the various initiatives of CCA, applied independently or collectively. Any P3DM initiative should be allowed ample time in all stages, as time constraints severely limit the flexibility of the model's use and the information that can be drawn from participants.

This method has widened the scope of WOTR's current understanding of P3DM and its vision's for future opportunities. We highly suggest that future practitioners will further develop and merge P3DM with WOTR's development initiatives and continue to supplement and ratify the information outlined here.

After experimenting with P3DM within the CCA context, we believe that this method can be highly effective for the following:

- The improvement of local capacity to understand and address the conceptual complexity of climate change.
- The enhancement of participation by project villages in their own resource planning, disaster risk reduction (DRR), and other programs associated with the CCA project.
- The communication of indigenous spatial knowledge concerning land use, cultural identity and environmental history among local villagers and WOTR staff, which pinpoints vulnerabilities and refines development objectives.
- The effective transfer of indigenous spatial knowledge to relevant government officials and other development agencies via geographic information technologies.

Land tenure planning and management in the Near East region

Daniel Danano, FAO RNE, Egypt

Land users in the Near East face various environmental, economic and social constraints that influence agricultural production. Agricultural production is not keeping pace with the increasing population growth in the region. Food prices, land degradation, tenure policies and property rights have contributed their part to declining agricultural land. Current land tenure systems are failing to address age old problems of urbanization, landless households and small farmers competing for limited and fragmented cropland, pastoralists losing control of their traditional grazing areas and access to water becoming increasingly important.

The Food and Agricultural Organization Office of the Near East Region (FAO-RNE) has started an initiative in 2011 to strengthen sustainable land management (SLM) and improve land productivity and tenure governance for improved food security and livelihoods in 20 counties.

Methodology/ Approach

- Studies on status of land use, planning, tenure and management: knowing the problem(s), analyzing the problems, developing intervention plans
- Projects: capacity building (member countries), technical support, strategies and policies improvements

Activities underway and planned

- Strengthen regional / subregional (Near East, North Africa, United Arab Emirates) and country networks
- Establish a database on SLM technologies and approaches based on wocat methodology
- Establish regional database that is linked to global WOCAT database
- Develop maps of land management and tenure using LADA-WOCAT methodology
- Analyze and evaluate information for screening best practices
- Prepare products tailored to various stakeholders
- Develop strategies and frameworks for scaling up best practices in land management and tenure
- Prepare projects and programs to support countries

Summary Topic 1

Innovative SLM technologies and approaches in view of food security, climate change resilience, and disaster risk reduction

- Climate change Mitigation concerns mainly technological options while adaptation concerns human behavioural change. Incremental adaptation is not enough we will need major transformations in agriculture to cope with CC. CC is not the same as climate variability
- We need to increase production to meet expanding food needs and to minimize negative effects of CC we need to reach and sustain the “safe operating space” for agriculture.
- We need to reduce ecological footprint of agriculture notably impacts on Biodiversity, Climate change and the Nitrogen cycle (Rockstrom SEI planetary boundaries)
- Need to understand trade-offs across subsectors and across spatial scales and different kinds of land users.
- Need for more quantitative information on impacts of land use/management and resource use efficiency for scenario analysis and investment in appropriate adaptation and mitigation options.
- SLM, climate smart agriculture and sustainable intensification are recognized win-wins for simultaneous productivity, adaptation and mitigation.
- Climate risk management involves Technologies, Institutions and Information Systems including weather forecasting and advisory services and insurance as well as land and water user rights, land use planning, community organization and regulations-by laws
- Conservation agriculture requires social innovation approach which requires farmer-farmer learning, farmer led experimentation and quantification and targeted funding. Approaches and decision support process are as important as the technology.
- To ensure impact all research should involve key stakeholder from the initial problem identification and participatory research action approaches including participatory 3d modeling for sustainable resource planning and CCA.
- Need to move beyond productionist approach to address all ecosystems services, landscape approach - on site and off site impacts e.g. dambo-seasonal wetland management, watershed management approaches- upstream-downstream and functional landscape approach. Payments for environmental services (PES) can be used to incentivate landscape management and restoration e.g. Green water credits, carbon trading, biodiversity conservation
- Scaling up requires getting buy in from national policy makers through development of country strategic investment frameworks as in TerrAfrica programme, see Country support tool.
- Knowledge management should be included in project design so that the findings can be capitalised upon and utilized.

Poster market and booth exhibition for sponsors, national and regional projects, achievements and initiatives

Poster presentations (for more details refer to the Posters found on the CD)

- Beneficial effects of conservation agricultural practices, DJ Beukes, MF Steinke & Wood PC, ARC-Institute for Soil, Climate and Water, South Africa.
- Conservation agriculture: A pro-active strategy to mitigate global warming and climate change, DJ Beukes, MF Steinke & Wood PC, ARC-Institute for Soil, Climate and Water, South Africa.
- Prospects and challenges on rainwater harvesting: the case of Talugtog, Nueva Ecija, Contreras Samuel, Bureau of Soils and Water Management Philippines
- A Transformational Exit Strategy for Gauteng Provincial Government Sustainable Resource Management (SRM) LandCare and Expanded Public Works Programme (EPWP) 'Beneficiaries' into Longer Term Sustainable Livelihoods Activities and Social Businesses, Melinda Swift and the SRM team, Gauteng Department of Agriculture, South Africa.
- Assessing the value of rehabilitation of degraded landscapes on the Bokkeveld Plateau (South Africa), Noel Oettlé¹, Lynn Kayser², Michael Kruspe², Ute Schmiedel² (¹ Environmental Monitoring Group, South Africa and ² University of Hamburg, Germany).
- Biodiversity Stewardship – an innovative mechanism to drive sustainable land management, Bonnie Schumann EWT-DCP, Christy Bragg – EWT-DCP, Mandy Schumann – Department Environment and Nature Conservation (DENC), South Africa.
- Documentation of SLM Technologies and Approaches, Kagera Transboundary Agroecosystem Management Project, Janie Rioux and Iwona Piechowiak, FAO, Italy.
- Assessment and Mapping of Land Degradation and SLM, Kagera Transboundary Agroecosystem Management Project, Sally Bunning and Monica Petri, FAO, Italy.
- Rain water harvesting guidelines, Rima Mekdaschi Studer, WOCAT Secretariat, Switzerland
- Audio-visual messages from land users to land users, Nicole Harari, WOCAT Secretariat, Switzerland.
- Identification and characterization of “hot spots” of land-use change and land degradation in Swaziland and in the South African province Kwazulu-Natal using remote sensing techniques, Michael Marz, University of Halle, Germany
- Developing key success criteria for rural development in the context of sustainable land-use management, S'phumelde Lucky Nkomo, Heinz Beckedahl, Urmilla Bp, University of Kwazulu-Natal



Poster presentations delivered by
Noel Oettlé, Samuel Contreras and Melinda Swift (Photos: WOCAT Secretariat)

Sponsors

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- International Erosion Control Association
- African Vetiver Network
- Hydromulch
- University of KwaZulu Natal
- Department of Agriculture, Forestry and Fisheries



Topic 2: Show applications of WOCAT-LADA tools and methods in local, national and global SLM programmes

Chair: Godert Van Lynden, ISRIC; rapporteur: Rima Mekdaschi Studer, WOCAT Secretariat

Keynote presentation 2: Decision Support for DRR based on watershed planning in Tajikistan

Hanspeter Liniger, WOCAT Secretariat, Switzerland

Tajikistan is particularly exposed to the risks of climate change. Its widely degraded landscapes are badly prepared to cope with changes in precipitation patterns, increased temperatures, droughts, and the spread of pests and disease. Sustainable land management (SLM) provides a “basket of opportunities” to address these challenges, particularly for increasing land productivity, improving livelihoods, protecting ecosystems and reducing disaster risk.

Within the Pilot Program for Climate Resilience (PPCR) in Tajikistan 70 SLM technologies and approaches on how to implement SLM were documented with the World Overview of Conservation Approaches and Technologies (WOCAT) tools in 2011. For this purpose a climate change adaptation module was developed and tested in order to enhance the understanding about climate change resilience of SLM practices and community workshops conducted to on adaptation mechanisms by rural communities in Tajikistan.

Stakeholder workshops for the identification and selection of appropriate SLM practices based on the “learning for sustainability (LforS)” methodology have been designed. During the first workshop day current problems related to land use and climate change impacts and possible solutions are discussed. In a next step, participants identify different SLM Technologies and Approaches already existing in the region and learn about practices applied by other countries from the WOCAT database and available WOCAT. On the last day, promising SLM technologies and approaches are identified from the WOCAT database and further selection is based on a scoring and decision process supported by a software for multi-objective decision support (MODSS).

The analysis came up with four guiding principles for applying SLM for adapting to climate change: 1. Diversification of land use technologies and farm incomes; 2. Intensification of use of natural resources; 3. Expansion of highly productive land use technologies; 4. Protection of land and livelihoods from extreme weather events. Furthermore, SLM must be up-scaled from isolated plots to entire zones or landscapes and the project developed the concept of three concentric villages zones, the in-, near- and off-village zones.

As a conclusion to foster climate change adaptation through SLM in Tajikistan the following key points need to be respected:

- SLM has a key role in disaster risk reduction and climate change adaptation
- To achieve results it is important to focus on both, land and water
- Productive SLM practices should be linked with protective SLM practices
- One should build up on existing local experiences combined with external knowledge and strengthen the decision capacities of people
- Land users knowledge and participation should be enhanced
- The village concept and a landscape approach have a key role
- Knowledge management and decision support have to be built into any SLM project right from the start
- Many disasters are human made

Land users, advisors, and decision- and policy makers face the task of finding management practices that best suit site-specific conditions. This task is most efficiently addressed in collaborative effort, and building up and managing a respective knowledge platform.

Input presentations topic 2



Input presentations delivered by Klaus Kellner, Feras Ziadat, Natalia Mitiakova and Heinz Beckendal (Photos: WOCAT Secretariat).

Erosion, rehabilitation and land management in dispersive soils in eastern South Africa

Heinz Beckendal, University of KwaZulu-Natal, South Africa

South Africa loses between 450 and 500 tonnes of soil annually. This translates to an average of some 4,1 t/ha/yr for the country, despite soil conservation measures. Although this value compares favourably with the 4,8t/ha/yr which is the global figure, it hides the fact that there is great variability in these values, ranging from less than 2t/ha/yr to more than 120t/ha/yr and, in extreme cases, peaking at above 250t/ha/yr.

It is argued that part of the reason for the unacceptably high soil loss values in some areas of the eastern part of the country is that these soils are dispersive (frequently characterised by high ESP and SAR values). When water moves through a dispersive soil, the clay and fine fraction of the soil goes into colloidal suspension and is removed as the water drains from the profile, leaving behind macropores in the soil. This becomes a self-accelerating process resulting in the formation of soil pipes, which follow the prevailing hydraulic gradient which will frequently bypass traditional soil conservation structures, thereby ultimately destroying them. The result is worse degradation than had no intervention been taken, highlighting the need for soil analyses during the planning phases of SLM projects.

It is argued that low gabions, designed to protect side walls and prevent further down cutting, rather than to facilitate sedimentation be used in dispersive soil. In addition, the principles of conservation agriculture should be applied and ponding of water or preferential points of infiltration should be avoided. It is argued that, by keeping the soil moisture content as uniform as possible, preferential pathways for soil water movement are avoided, thus not facilitating the development of soil pipes.

Role of WOCAT in UNCCD: potentials and constraints in South Africa, Practice project example

Klaus Kellner, North West University, South Africa

One of the main aims of the WOCAT programme is that land and livelihoods are improved through sharing and enhancing knowledge about Sustainable Land Management (SLM) practices. Innovation and the decision-making processes, particularly in connection with soil and water conservation (SWC) will thereby be enhanced leading to capacity building activities. WOCAT tries to connect different stakeholders at field level, as well as agricultural advisors and extension workers, project implementers and designers, researchers and donors. These elements are also included in the objectives of the United Nations Convention to Combat Desertification (UNCCD), which was established in 1994 after the Rio Earth Summit of 1992. The UNCCD is governed by the Conference of Parties (COP) and has implemented various programs to improve the living conditions of the local people through a bottom-up, participatory approach, thereby encouraging knowledge transfer and decision making by implementing SLM and combating desertification, land degradation and drought (DLDD). These include e.g. the 10 year Strategic plan and framework (2008-2018) of the UNCCD, the UN Decade for Deserts and the Fight against Desertification (UNDDDD) (till December 2020), as well as the Zero Net Land Degradation (ZNLDD) plan till 2030 that was announced at the RIO + 20 Conference. The goals of the UNCCD are also implemented through the National (NAP), Sub-regional (SRAP) and Regional (RAP) Action Programmes

and often debated at the scientific conferences that are organised by the Committee for Science and Technology (CST) of the UNCCD. The activities and projects of WOCAT in South Africa, as well as the eight projects of the North-West University and how they relate to each other and to the goals of the UNCCD, will be discussed at the workshop.

The example of how the European Commission funded PRACTICE (Prevention and Restoration Actions to Combat Desertification: An Integrated Approach) project was implemented in South Africa, which included an integrated evaluation of practices to combat desertification (including biophysical and socio-economic factors, local and scientific knowledge) will also be discussed. During the PRACTICE project, different stakeholders, including local farmers were interviewed and their knowledge documented about the indicators (e.g. Income and profit, biodiversity, grazing capacity, animal condition and value, forage production and value, grass abundance, woody plant density, soil condition and conservation, costs and risks such as drought and fire) that are used to assess the success of five restoration technologies applied, such as rotational grazing management vs no grazing management, the chemical control of woody plants vs no control, as well as revegetation practices. The restoration practices were quantitatively assessed and through an integrative approach and statistical analysis, the results indicated that the implementation of good management strategies can be regarded as one of the best SLM action which will further result in an increased biomass and forage production with less woody encroachment. Although re-vegetation can also improve the rangeland condition, it will require higher inputs. This project contributed to better knowledge sharing and created a social learning strategy between all stakeholders, as promoted by WOCAT and the UNCCD.

Use of WOCAT-LADA tools and methods in regional/national programmes to support SLM planning - Example of the FAO Kagera River Basin Transboundary Agro-ecosystem Management project

Sally Bunning, FAO, Italy

The overall objectives of the GEF Kagera Transboundary Agro-ecosystem Management Project in Burundi, Rwanda, Tanzania and Uganda includes the sustainable management of land resources and agricultural ecosystems (SLaM) in the basin for reversing land degradation, improving agricultural production and the sustainable use of agro-biodiversity, sequestering carbon and adapting to climate change, and contributing to enhanced food and livelihood security and the protection of international waters. One of the key project outcome is improved land and agro-ecosystem management practices implemented and benefitting land users for the range of agroecosystems in the basin.

The project has successfully implemented a series of capacity building activities in the Kagera basin with Governments and other partners using robust tools and methods. In particular LADA-WOCAT tools have been used for SLM Planning and decision making.

On the basis of the Farmer Field Schools (FFS) and catchment process there have been a number of lessons learnt for successful adoption and scaling up of SLM at farm and catchment /watershed levels:

1. Participatory process with all stakeholders from diagnosis to SLM/catchment action planning to impact monitoring and documentation
2. Change behaviour/ Code of conduct – a commitment to soil and water conservation and sustainable agriculture by Farmers (farm plan), the wider Community (catchment plan) and Government and other partners (through demonstrating costs effectiveness in achieving a range of environmental, social and economic impacts i.e. economic reasoning)
3. Improving livelihoods by: i) Increase in productivity and reduced risk (climate variability- drought, intense rains, pest and disease control); ii) Adaptive management to address needs and demands of diverse land users (farmers, herders, users of water, energy and forest resources)
4. Need to provide continuous Support and Incentives for wider SLaM adoption at watershed/landscape scale by: i) Continuous technical support and networking among FFS, catchment committees and local authorities; ii) Participatory negotiated territorial development approaches to address NR conflict, tenure security and access over NR; iii) Financial incentives through payments for environmental services (PES), credit, investment and market opportunities.
5. Above all the key is to convince the Government and partners to cooperate (joint programs), to invest (co-financing); to build capacities (technical support) and ensure full involvement of the range of stakeholders (land users to policy makers).

Application of WOCAT tools and methods in the HKH region

Madhav Dhakal, ICIMOD, Nepal

International Centre for Integrated Mountain Development (ICIMOD) is the focal point for the regional network (Himalayan Conservation Approaches and Technologies -HIMCAT) of World Overview of Conservation Approaches and Technologies (WOCAT). HIMCAT network was established in 2004, since the establishment year it has been promoting WOCAT tools and methods in the Hindu Kush Himalayan countries.

The aim of the HIMCAT network is to Strengthening Cooperation, Collaboration, and Communication among Himalayan NRM - particularly SLM partners through promotion of WOCAT tools and methods and documentation, and sharing and evaluation of good practice from the region for the livelihood improvement of the land users.

Hands on practical training were the method applied to promote WOCAT tools in the HKH region. Many capacity building trainings were organized in Afghanistan (2010, 2011 and 2012), Nepal (2003, 2009 and 2010), Bhutan (2008), Bangladesh (2004 and 2005), Myanmar (2010) and Pakistan (2009). The training had introductory session, documentation of technologies and approaches in the field, and introduction to database, database entry, and summary sheet preparation. Basic version of WOCAT questionnaire (QT and QA) was used to document good practices from the field.

Output of the trainings was different country level fact sheets. Nepal shared 2 publications named "Natural Resources Management Approaches and Technologies in Nepal" in 2008 and in 2013 with 52 practices (technologies and approaches). Bangladesh also shared 2 publications named "Selected Natural Resources Management Approaches and Technologies from Different Agro ecological Zones of Bangladesh" in 2006 and in 2009 with 35 good practices. Similarly, Afghanistan and Bhutan have also shared their publication in 2012. Watershed Module was also tested in Koshi river basin of Nepal.

HIMCAT is committed to share SLM knowledge from the field for the benefits of large number of land users. Many good practices still need to be documented and shared from the region involving new organizations and institutions with capacity building trainings.

Similarity and suitability analysis to assist the out-scaling of SLM at national and regional levels in West Asia and North Africa

Feras Ziadat, Mohammed Karrou, Theib Oweis, Tarek Kandakji, ICARDA, Amman, Jordan

Water scarcity and land degradation are among the most important factors that affect agricultural production and sustainability in West Asia and North Africa (WANA). Through the Water Benchmark projects, ICARDA, in collaboration with the National Agricultural Research Systems (NARS) partners, has developed, fine-tuned and tested techniques/technologies that can help conserve and better use natural resources and hence improve land and water productivities and farmers' incomes and livelihoods. Among the interventions developed in the three main agro-ecosystems in WANA are water harvesting in the Steppe benchmark sites of Jordan (Vallerani system for contour ridges construction), water saving techniques (raised bed and deficit irrigation) in the Irrigated benchmark sites of Egypt and supplemental irrigation in the rainfed benchmark site of Morocco. The technologies were also tested at satellite sites that are linked to each of the benchmark sites. To help achieve and facilitate the dissemination of the suitable techniques/technologies at a large scale to similar areas in WANA region, agro-ecosystem similarity maps were generated at regional level using expert criteria and the available general datasets. Soil, climate, topography, land use and water resources are among the factors used to develop these criteria. These similarity maps were verified and fine-tuned at national level using the same criteria but with more detailed information. Suitability analysis will be used within the similar areas, at national level, to identify areas where the developed SLM packages can be applied with high potential of success. This is the first step toward broader dissemination. The decision makers can use this information to target the out-scaling of the improved and more adapted technologies.

GIZ activities in Central Asia in the sphere of sustainable natural resources management in view of food security, climate change resilience and disaster risk reduction

Natalia Mitiakova, GIZ, Kyrgyzstan

Central Asia is suffering from the consequences of climate change. The continued expansion of deserts and arid areas are expected, along with above-average increases in temperature and water shortages. Natural resources such as pasture, forests and wildlife are also scarce because upon the collapse of the Socialist agricultural system and its infrastructure, communities and newly emerging companies in the countries of the former Soviet Union began to use natural resources in a reckless and uncoordinated way.

The governments of Central Asian Countries (CAC) have now understood the dangers, but they are mostly overwhelmed when it comes to solving the problems.

Therefore for several years the GIZ regional programme for sustainable use of natural resources in Central Asia has been developing new, regionally adapted approaches for the participatory and sustainable management of natural resources such as pasture, forest and wildlife in order to make them are being managed in an economically viable, socially acceptable and ecologically sustainable way.

The GIZ Regional Programme aims to collect and store this successful SLM experience for further up-and-out-scaling at national and regional levels in Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan.

While searching an affordable and universally accepted tool for documenting best practices, GIZ programme have finally set its choice on WOCAT as an internationally recognized tool which satisfies GIZ programmes' specific needs such as open access, ability to cover all thematic areas of the GIZ Regional Programme (forest, pasture, wildlife) and bilingual documenting (En and Ru).

In order to accumulate GIZ SLM experience in the WOCAT DB, we have selected, documented and posted in the WOCAT online database 28 SLM best practices have been developed in 5 CAC, in Russian and English languages. "Joint Forestry Management" and "Saving Book Approach" in Tajikistan, "Joint Pasture Management" and "Joint Wildlife Management" in Kyrgyzstan are among them. Since many technologies are often introduced within only one approach, some GIZ SLM practices were documented as package of approaches and technologies in order to get a clear comprehensive description.

Perhaps our SLM practices don't contain specific innovations, but they are adapted to local conditions and have proven their effectiveness in a specificity of CAC.

GIZ many years' experience of work shows that there is a necessity in CA in tools for documenting and storage SLM best practices. WOCAT demonstrates itself as reliable, universal and standardized means for that and there is no alternative for WOCAT now in Central Asia.

For example, GEF/FAO Project "Sustainable management of mountainous forest and land resources under climate change conditions" just started in Kyrgyzstan. Being the project's partner, GIZ Regional Programme is going to contribute to the project implementation trying to convince the project staff to use GIZ pilot experience which has been documented in WOCAT. The second aim is to introduce WOCAT tools into project implementation process in order to use them for documentation of new experiences which will be gained during project implementation.

And finally we would like to share briefly GIZ programme experience in using WOCAT tools and show its strengths and weaknesses which facilitate our work on or put difficulties in the way of documentation of best practices and their extraction from WOCAT DB for further dissemination and exchange.

Best Practices for Sustainable Land Management in Dryland Areas of China

Zengming Song, State Forestry Administration, PRC, China

Land degradation severely affected western China, both in ecological and social-economic. By the end of 2009, China had a total desertified land area of 2,623,700 km² making up 27.33% of the national territory, which decreased by 12,454 km² compared with that of 2004. The PRC-GEF Partnership on Land Degradation in Dryland Ecosystems, established in 2002 between GEF and China government, played important role for the achievements, especially the extension and upscaling of best practices for sustainable land management.

It is the important content of collection, analysis, publish, and extension of best practices of SLM from the beginning of the Partnership. By now, 45 technologies and approaches have been published in two volumes, and have been extended at least 48.2 million ha in western China. The 45 technologies and approaches can be grouped into five categories, including (1) soil and water conservation, (2) desertification control, (3) grassland degradation control, (4) salinization control, and (5) environmental management. Each system comprises traditional techniques, modern techniques, precautionary techniques and management techniques.

Experiences of the Application of WOCAT Tools for the Assessment of Climate Resilient Livelihood Options in Drought Prone Areas of Southern Mozambique

Simon Croxton, OneWorld Sustainable Investments, South Africa

In Mozambique, rural, mainly natural resource-based livelihoods are vulnerable to climate change and have limited adaptive capacities. In order to develop strategies for climate change adaptation through sustainable land and water management (SLWM), and especially the development of drought resilience, we need to understand the state of natural resources in Mozambique today, existing opportunities for climate/drought resilient adaptation, and the policy and technology interventions required to scale up these opportunities. The goal of this study is to provide the necessary understanding and recommendations for specific drought resilient interventions in the Limpopo River Basin, based on existing experience and best practice in SLWM. The integrated assessment will be facilitated by workshops, by documenting case studies using the WOCAT approach and technology questionnaires, and by conducting an integrated analysis of SLWM practices and policies guided by the Resilience Check . It will draw on diverse knowledge systems, from local and indigenous knowledge and practices in drought-prone areas, to state/government interventions in the form of policies and SLWM initiatives. WOCAT is providing the framework for data collection and documentation, monitoring, evaluation and dissemination of SLWM knowledge to support decisions. The following WOCAT tools will be employed:

- The questionnaire on SLWM technologies (QT) is being used to structure information collection on the specifications of a technology, where it is being implemented (describing both the natural and human environments) and what impact it has. This includes the classification of land degradation, economic assessment, and evaluation of the strengths and weaknesses of the technology.
- The questionnaire on SLWM approaches (QA) is being used to gather information on the ways and means used to promote and implement a SLWM technology and to support its adoption to achieve more sustainable soil and water use. This includes identification of all participants, inputs and means, and knowledge, at scales ranging from the individual farm, through the community level, the extension system, the regional or national administration, and the policy level.

For this study, with its specific focus on climate change, we will also use the WOCAT Climate Module. This builds on the basic WOCAT questionnaires and evaluates them in the context of climate change. This will allow us to address the key question of how resilient, or how vulnerable, technologies are to climate change. The presentation will report on experiences gained during two months of project implementation, including participatory analysis of climate resilient adaptation options, and preliminary WOCAT data collation.

The Berg River Project: powering the Green Economy

Francis Steyn, Western Cape Department of Agriculture, South Africa

Theme: Sustainable Land Management Technologies

Linkage to the Green Economy displayed in the National and Provincial outcomes

The Department of Agriculture: Western Cape's Annual Performance Plan for the 2012/13 Financial Year identified a number of strategic changes with particular emphasis on:

- At a national level twelve National Outcomes (NOs) were identified and the achievement of some of these outcomes (particularly those focussing on economic growth, workforce development, rural development, protecting the environment and service delivery) do need particular actions to be taken by the Western Cape Department of Agriculture.
- At the same time the Provincial Cabinet accepted twelve Provincial Strategic Objectives (PSOs) and the Provincial Department of Agriculture received the responsibility to coordinate the implementation of PSO 10 (Creating opportunities for growth and development in rural areas). The Department is also responsible for key elements in other PSO such as those addressing economic growth and jobs, sustainability, poverty and integrated service delivery.

This project will address many of the National Outcomes and Provincial Strategic Objectives as explained below in the Executive summary:

Executive summary

This project is work in progress and it has already demonstrated great value in promoting the Green Economy, by adding financial value to alien biomass which could result in the beginning of the end of one of our greatest threats to biodiversity in South Africa; namely alien plant infestation. The ultimate aim of this project is to restore the most important river system in the Cape Town Metro pole area to a healthy river system that will promote human wellbeing. To remove the alien vegetation and replace this with indigenous vegetation would cost the Government approximately R300 million and the sustainability of the present initiatives could be doubtful. This project is aimed at doing this clearing by creating a value for the biomass and thereby adding value to the problem. This value would then partially or even totally fund the restoration and the biomass could be used to enhance energy production further displaying sustainable technologies.

This important natural resource affects every person indirectly in the Metro pole area due to the food that is produced from this resource and the value adding from the agricultural industry. This river also supply a major portion of the water required for domestic purposes in the Cape Metro. Some 22 500 ha of irrigation of high value crops on 600 farm units along the Berg River resulted in a gross farm gate value of R 911 million of which R 642 million was from exports (2005 figures). The agricultural activities also provided 14 100 permanent and 16 500 temporary jobs during 2005. Presently this resource is in a degraded state and poses a major threat to human health, decline of rural economy (especially the loss of permanent jobs), negatively affect the entire value adding economy of the Western Cape and further degradation of the environment increasing the risk of losing more precious natural resources during flooding events.

A healthy river system would enhance the economy of the Western Cape by creating more permanent jobs, especially in Agriculture, but more importantly in new industries, such as Agri Tourism, created due to the vast improvement in the quantity and quality of water within the Berg River system. The improvement of the quality of water alone could prevent the risk of losing important export markets to the value of billions of rand to the economy. The removal of 1500 ha of alien plants would save enough water for the planting of at least as many hectares of food crops thereby building our base to food security in the Province.

Summary Topic 2

Show applications of WOCAT-LADA tools and methods in local, national and global SLM programmes

1. Key role of SLM and knowledge management in DRR and CC-Adaptation (examples from Mongolia, Tajikistan)
 - Land and water nexus (water cycle, on and off-site impacts)
 - Linking production (local) with protection (watershed)
 - Building up on existing local experiences
 - Enhance land users knowledge and participation
 - Key role of landscape approach and the village concept
 - KM DS to be build into/ mainstreamed into projects right from the start
 - Many disasters are human made, inappropriate landuse and management
 - State of degradation is related to the potential of an area (position/ exposition/ slope)
2. WOCAT tries to connect multilevel and multisectorial stakeholders, encourages knowledge sharing and decision making and creates a social learning strategy. These elements are also included in the objectives of the United Nations Convention to Combat Desertification (UNCCD). Zero percent LD by 2030 initiative by UNCCD.
3. WOCAT-LADA methodology as national tool: make a quick overview of what is happening in the area (QM), identify problems and bottle necks (land tenure issues, marginalized groups, etc), inventory of what solutions are available in the area and 'abroad' (QT and QA), identify and select most promising solutions to be tested (decision support tool).
4. Integrative approach: local knowledge backed up with quantitative assessment (through students' thesis), more statistical analysis and comparison of the different technologies, Know your soil and the behaviour of soil before implementing any techniques.
5. More awareness raising also for and among Partners. Up to now SLM not properly financed at the national to global level.
6. Capacity building to encourage and improve the confidence of resource persons, focal points, etc to use and spread the WOCAT-LADA tools in a country or region.
7. Out (Up)-scaling is primarily a social innovation. It emphasizes the approaches that lead to an impact.
8. South Africa: Government created an enabling environment to the private sector to take over (business incorporated into development)
9. ICARDA: Similarity and Suitability Analysis: Agro-ecosystem similarity maps are generated at regional level using expert criteria and the available general datasets (soil, climate, land use and water resources, etc). Suitability analysis is used within similar areas, at national level, to identify areas where the developed SLM packages can be applied with high potential of success (socio-economic aspects).

Topic 3: The development and use of innovative tools for SLM decisions support and knowledge management at local and national level.

Chair: Garry Patterson, Agricultural Research Council, South; Rapporteur: Janie Rioux, FAO

Keynote presentation 3: Mobile and web applications: New possibilities and challenges for the WOCAT network

Carin Pretorius, CEIT Development, Namibia and Dirk Pretorius, Manstrat, South Africa

By 2013 mobile phones will overtake PCs as the most common Web access device worldwide. WOCATUTOPIA: regular websites vs mobile websites; mobile website vs mobile applications? What is better will depend on the goal to be followed, the “why” and “what to be accomplished” and considers factors such as accessibility, compatibility, findability, sharing, cost, etc. WOCAT has to re-imagine the existing online systems into mobile systems.

As an example the prototype of including WOCAT SLM technologies in AgriSuite Mobile™ (Manstrat) is presented. AgriSuite Mobile™ is a mobile application based on the trusted datasets of Extension Suite Online™, made available for the mobile user. It provides a complete range of agricultural information for the farmer. The application Sustainable Land Management contains a collection of 42 WOCAT case studies. The case studies have been classified into technology groups (e.g. conservation agriculture, agroforestry, water harvesting) and each technology is described in terms of climatic zone, land use type, degradation type, conservation measure and intervention type. The case studies can be viewed by selecting the option ‘view 4 page summary’ or by selecting ‘Email to PC’. This application will be launched soon.

Input presentations topic 3

Development of a decision support tool for selecting sustainable land management technologies in the upper Tana basin

Paul Kahiga, Jomo Kenyatta University, Kenya

In this work, a computer based Decision Support Tool (DST-MATSIM TOOL) for Sustainable Land Management (SLM) technologies in the upper Tana basin is developed using Microsoft Access VBA software. The tool was designed to assist the farmers and other watershed managers in decision making on SLM technologies suitable for enhancing eco-system services and climate change adaptation. It contains a set of SLM technologies that has been evaluated and analyzed at field level using World Overview of Conservation Approaches and Technologies (WOCAT) methodology. Every SLM Technology in the set has been documented and presented using a standardized WOCAT global template. The decision of the appropriate SLM technologies to be used depends on a number of factors which the user must know in order to arrive at appropriate decision. In this model, the type of SLM technology chosen follows a specified hierarchy. The upper Tana basin provides a typical example of other basins in Kenya characterized by diverse conflicting land uses which do not promote sustainable land management. Therefore, this paper presents a conceptual framework which can be adopted in order to arrive at an appropriate decision for sustainable land management at basin level. The tool creates a knowledge sharing platform for farmers to share knowledge on SLM technologies within the same Agro-ecological Zones (AEZs). The paper highlights how decision support systems can be used for sustainable land use management.

National Level Land Management Campaign - An approach for advocacy & awareness raising on protecting limited land resource (not the same title as in the programme)

Tashi Wangdi, National Soil Services Centre, Bhutan

The Royal Government of Bhutan (RGoB) has long recognized the negative impacts of land degradation and has initiated land management activities since early 1980s. However, during late 1980s and early 1990s, there has been change in Government priorities and land management received limited focus and investment. Following the flash floods of 2004 that hit most part of eastern Bhutan causing heavy losses to human lives and assets, the RGoB realized the need to step up sustainable land management in the country. Therefore, the Ministry of Agriculture & Forests initiated national level land management campaign (LMC) starting 2005. The main objectives of the campaign are: 1) to advocate and create awareness on the importance of protecting limited land resources, 2) to demonstrate various SLM technologies at one site, and 3) to show that combating land degradation is a collective responsibility by

mobilizing communities, planners and policy makers. The experience of LMC has been positive. It has proven to be an effective approach for advocating and raising awareness on SLM. LMC is now successfully institutionalized within the local development plans and programs and has become an annual event. The LMC is generally organized coinciding with the World Day to Combat Desertification and Land Degradation which fall on 17th June every year.

Action learning and role-play: An innovative option for training rural communities in Sustainable Land Management

Danie Steyn, AgriSkills, South Africa

The "Farmtogether" training programme was designed for the training of co-operatives and is structured into 6 contact modules. The modules can be run consecutively over 6 weeks or there can be longer periods between modules. All the tasks are relevant to the running of their cooperatives

The learning programme is presented as a series of simulations, role plays and home exercises that offer participants an experiential environment in which to test and experience the consequences of their choices and actions and thereafter reflect on, reinforce with repetition. Participants actively and collectively engage in a range of non-threatening problem solving processes where they are able to:

- Experiment with potential scenarios and choices that they could face in their daily lives without fear.
- Enter into and test imaginative problem solving scenarios that are not livelihood threatening.
- By-pass the often daunting formal learning processes, methodologies and structures without losing the learning

Throughout the training programme participants are encouraged to talk, debate, compare, laugh (a lot), experience and even argue. Within this process, critical cross-field competencies such as problem identifying and problems solving, communicating and working together and conflict management are automatically called into play.

The central component of the training programme is a farm simulation that tests the farmers' production and investment choices and consequences. In the simulation game, the farmers are provided with the elements that they require to plan production on a given area of land.

Grants buy votes locally and grants from overseas buy image. Profit alleviates poverty so grants must be turned into profitable businesses.

Audio-visual messages from land users to land users – Application of video for knowledge sharing in SLM

Nicole Harari and Hanspeter Liniger, WOCAT Secretariat, Switzerland

Based on data from the growing global WOCAT database, SLM practices are presented in an attractive, standardised, soft- and hard-copy format. However, what is lacking is informative audiovisual material from land users to land users showing how SLM works, what problems it solves, how challenges can be overcome, and what benefits – locally, regionally, and globally – can be achieved. Against this backdrop, WOCAT is applying video as an innovative audiovisual tool to support and complement WOCAT knowledge on innovative SLM technologies and approaches. Through the combination of audiovisual information, based on local experiences and scientific knowledge on SLM, a powerful package for knowledge sharing and decision-making in SLM is being created for use by different stakeholders and for various purposes. The aim is to apply video in promoting SLM by reaching out to a broad range of stakeholders acting as intermediaries between land users in rural development.

The overall goal is to enrich and promote knowledge on existing successful and innovative technologies and approaches in SLM through audiovisualisation using video and new media to improve resilience and livelihoods of rural communities AND improve ecosystem services in areas prone to land degradation.

The objectives are:

- To give a voice to land users.
- To capture and share SLM knowledge documented in the WOCAT database in an innovative and attractive way for easy understanding and application for a broad range of stakeholders.
- To create awareness of the wealth of the WOCAT knowledge and the local, national, and global importance of SLM.

- To highlight the dependency of land users within watersheds and show their adaptations to a changing environment.
- To “adWOCATe” for SLM and to assist in scaling up SLM.

WOCAT has developed standardised tools and methods for the documentation, evaluation, and dissemination of good SLM practices i) at the local / field level, ii) at the (sub-) national and regional level and iii) at the global level. Directly linked to these are the following five products:

1. Establishment of the WOCAT video sharing platform
2. Creation and sharing of SLM video clips linked to the WOCAT knowledge base
3. Production of instructional videos on SLM technologies and approaches for training purposes
4. Production of SLM documentaries for national TV broadcast
5. Creation of SLM awareness documentaries for the global community

Taking into consideration the relevant target groups in SLM, different video products are generated for the following stakeholders:

- technical staff, extension workers, agricultural advisors, project implementers – at field level
- planners, project designers, decision-makers, researchers – at (sub-) national level
- international programme planners, donors – at regional and global level

These target groups act as intermediaries while the *ultimate target group and beneficiaries reached are land users and the public, who benefit from more secure production and environmental services.*



Summary Topic 3

The development and use of innovative tools for SLM decisions support and knowledge management at local and national level

3 key findings of the session:

- Mobile applications and videos are gaining more and more interest- and this is the way forward for WOCAT
- Using the results of the WOCAT T and A for decision support e.g. of Kenya for watershed planning
- Need for mainstreaming and continuous support for SLM to ensure upscaling
- Learning game with farmers so they develop their cooperative as a business – that can be a platform for further learning on SLM

Existing or possible links with WOCAT:

- All those innovative tools and approaches are informative for the future development of the WOCAT tools
- Concrete recommendations and next steps:
- To start developing an application for the WOCAT tools
- To improve the database with more analysis functions
- To develop the concept on the videos and share user manual
- And to secure further funding to do all of this?!

Topic 4: Success café - Group work on success stories how WOCAT-LADA tools and methods were used in projects/programmes

Task for success café: Are WOCAT-LADA tools used in your projects/programmes?

If yes: • Please share success stories of the use of WOCAT-LADA tools in your country/region

• Why can it be considered a success (e.g. benefits and comparative advantage)

• Countries select one success story to be captured on video

If no: • Reflect on how you could make these tools a success in your work

Task/ Group	Asia	Africa and Near East	South Africa
Success stories	28 best practices from 5 countries	Upscaling of SLM good practices, participatory (Ethiopia) Promotion of SLM (Syria) Monitoring LD and promotion of SLM (Tunisia)	Afro Maison project WOCAT-LADA national mapping National Park Rehabilitation (NPR)
Why a success - benefits	Legislation improvement, new policies formulated (e.g new forestry code, Kyrgyzstan); Up and outscaling of BP within region	Can be used as monitoring LD and SLM tool SLM education, capacity building and awareness raising	Adjustable tool: e.g. for NPR needed to address biodiversity, 4 indicators were added. Justification of budget allocations Using of existing tools for INRM
How to mainstream	Get increased investment for SLM Strengthen cooperation between regions and cross-sectorial institutions DSS, support for prioritizing projects (maps)	Mainstream tools in ministries and extension services Influence policies and regulations to limit LD More outreach (including tool) to the farming communities More awareness for more funding More monitoring for evidence based decision making Agro-ecological hubs vs regional hubs	DSS, support for prioritizing projects (maps) at national planning level



Success café: group work (Photos: WOCAT Secretariat)

Closing: Take home messages

- Wide application and further development of WOCAT → amazing network
- Why a joint KM and DS system? Why together? → synergies
- Need to use and further develop WOCAT system → reaching more people!
- Need for updating, sharing and training of WOCAT partners → confidence
- Include research in KM & DS → combine stakeholder with scientific knowledge
- Strengthen link local - national - global (cross-scaling)
- Landscape, watershed, windshed approaches
- Land mgt – water link: → Quantity (surface, groundwater) and Quality
- WOCAT is you → be a WOCATeer
- Raise awareness on the role of SLM

WOCAT Workshop group picture (Photo: H. Liniger)



2 16TH WOCAT WORKSHOP AND STEERING MEETING

Opening

Chair: Lehman Lindeque; Rapporteur: Rima Mekdaschi Studer

Welcome and introduction

Hanspeter Liniger

Hanspeter Liniger welcomed everybody to the WOCAT Workshop, thanked the South African team to host the WOCAT Workshop and emphasized the importance of the gathering.

The 16th WOCAT Workshop followed the 2 day WOCAT Share Fair and the 1 day field day. The outcomes of the Share Fair were further developed, progress evaluated and directions for the way forward set.

Aims and objectives

- Discuss new user friendly applications and innovative tools and methods for SLM knowledge management and decision support, with a special focus on mapping and the climate change adaptation module.
- Further share experiences in applying WOCAT and related tools in local, national and global SLM programmes (UNCCD, GEF projects (e.g. LADA-WOCAT), WB projects, GGWI, bilateral projects, etc.)
- Progress report of WOCAT country initiatives
- New demands, problems, gaps and development by WOCAT members identified
- Future planning by WOCAT country initiatives, partners and members
- Update on new WOCAT set-up with new defined Steering Committee and link to other large scale programmes (UNCCD, GEF, WB, etc.)
- Launch WOCAT International (the new framework agreement) and further develop and adapt the new WOCAT strategy.
- Promote WOCAT and the expansion of the WOCAT network to other countries and regions.

Summary of Share Fair

Hanspeter Liniger

The take home messages of the Share Fair can be summarised as follows:

- Wide application and further development of WOCAT → amazing network
- Why a joint KM and DS system? Why together? → synergies
- Need to use and further develop WOCAT system → reaching more people!
- Need for updating, sharing and training of WOCAT partners → confidence
- Include research in KM & DS → combine stakeholder with scientific knowledge
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- WOCAT is you → be a WOCATeer
- Raise awareness on the role of SLM

Reflections on field day

Hanspeter Liniger and Lehman Lindeque

The WOCAT field day took place in the Pretoria and Midrand local municipalities, Gauteng province (Annex 1A).

The field trip comprised two main activities: i) to introduce the WOCAT Mapping questionnaire (WOCAT QM) and the concept of developing a base map for a land degradation and conservation assessment at local level (farm level) and ii) to visit a permaculture training center and demonstration farm to introduce different concepts of permaculture to workshop participants, but also to link these conservation measures to WOCAT in the sense of using the WOCAT Methodology to describe these measures.

Reflections on the mapping exercise

- The mapping tool is scale independent and can be used at various scales: national, regional local.
- The mapping units are the starting point
 - LUS (broad → detailed), landscape, administrative units, ...
 - needs to be created in most cases
 - Needs local / national adjustments
- Land degradation and Conservation:
 - Difficulties if manual is not (properly) read.
 - Needs good illustrations, showing the range from good (potential) to bad.
 - Combination of own and land user assessment and data is needed.
 - The method is simple, rapid, and robust.
- Introduction to get the taste... trigger feedback, improvements
- Very well prepared, done with lots of resource persons → thanks
- Up-scaling the use: → e-learning, animated powerpoints, video
→ for initial training then follow-up by experienced trainers.

Permaculture:

- Great variety of SLM Ts: Separate or in combination
- The importance of permanent cover: perennials, multistorey, rotation, mulch → not enough from own production
- Imported: Mulch and water harvested outside: question of scale?
- Water, nutrient and carbon cycle: no waste...
- Mimicking nature!!!
- Engagement!!!
- How to transfer his knowledge?
- At the border or urban: Challenge but also opportunity

Update on new WOCAT set-up with new defined Steering Committee and link to other large scale programmes (UNCCD, GEF, WB, etc.)

Isabelle Providoli

In 2012 a new SDC funding phase started which is lasting 4 years (2012 – 2015). The overall goal of the new phase is “*to improve resilience and livelihoods of communities AND improve ecosystem services in areas prone to land degradation through promotion and upscaling of SLM practices at different levels*”.

The objectives of the new phase can be summarised as:

- Develop the institutional architecture, management structure and legal entity to upscale and mainstream WOCAT as the global KM platform for making decisions on SLM investments, locally, nationally, regionally and internationally.
- Continuously build the methods, tools, guidance, training and capacity-building to support KM & DS for SLM, develop innovative approaches for awareness raising and up-scaling of SLM and extend the service to new areas (e.g. watershed/water resource management, climate change adaptation, biodiversity conservation).

The new phase consists of a transition period (2012-2013) in which WOCAT International will be established, the WOCAT network will be enhanced and gain recognition, and a user-friendly website and database will be available. The transition period will be followed by a consolidation period (2014-2015) in which the focus will shift from institutional issues to more topical issued and demand driven content. Up to then WOCAT International will consist of at least 5 consortium partners.

In response to the need to formalise the to date informal global WOCAT network a Framework Agreement defining the WOCAT Network as WOCAT International, and WOCAT Regional and National will be elaborated and legally safeguarded. In the new formalized set-up WOCAT will be called WOCAT International and can be described as a simple partnership.

Regional and national institutional WOCAT members will sign a Memorandum of Understanding with WOCAT International, describing their specific roles and functions.

2.1 TOPIC DISCUSSION

Role of SLM in Disaster Risk Reduction (DRR), Watershed Management and Climate Change Adaptation

Decision support for DRR based on watershed planning in Tajikistan

Hanspeter Liniger

Tajikistan is particularly exposed to the risks of climate change. Its widely degraded landscapes are badly prepared to cope with changes in precipitation patterns, increased temperatures, droughts, and the spread of pests and disease. Sustainable land management (SLM) provides a “basket of opportunities” to address these challenges, particularly for increasing land productivity, improving livelihoods, and protecting ecosystems.

Within the Pilot Program for Climate Resilience (PPCR) in Tajikistan 70 SLM technologies and approaches on how to implement SLM were documented with the World Overview of Conservation Approaches and Technologies (WOCAT) tools in 2011. For this purpose a climate change adaptation module was developed and tested in order to enhance the understanding about climate change resilience of SLM practices and community workshops conducted to on adaptation mechanisms by rural communities in Tajikistan.

The analysis came up with four guiding principles for applying SLM for adapting to climate change: 1. Diversification of land use technologies and farm incomes; 2. Intensification of use of natural resources; 3. Expansion of highly productive land use technologies; 4. Protection of land and livelihoods from extreme weather events. Furthermore, SLM must be up-scaled from isolated plots to entire zones or landscapes and the project developed the concept of three concentric villages zones, the in-, near- and off-village zones.

Land users, advisors, and decision- and policy makers face the task of finding management practices that best suit site-specific conditions. This task is most efficiently addressed in collaborative effort, and building up and managing a respective knowledge platform.

Perceptions on land degradation and conservation: Progress with and selected results of the LADA National Assessment Project.

Lehman Lindeque

One of the main questions asked by professionals and practitioners involved in land degradation and the sustainable use of natural resources is: "How do people perceive land degradation and how do they respond to these problems?"

The purpose of this presentation is first of all to give background of the FAO funded LADA project, specifically the LADA National Assessment, the methodology used for data collection, the scale of assessment as well as the variables assessed. The bulk of the presentation will focus on assessment results in the form of maps, tables and figures to illustrate the potential analysis and reporting of WOCAT QM variables. Some of the variables discussed include changes in land use area and intensity trend, reasons for changes in trends, main degradation types, causes and impacts of land degradation as well as the current responses to land degradation problems as well as the effectiveness and impact thereof. All the examples are abstracts from the LADA National Assessment data for South Africa.

Finally the issue is discussed how we move from WOCAT QM data to informed decision making. This discussion involves the identification of priority areas for intervention and deciding what needs to be done in these priority areas. A flow diagram is used to explain the logic and reasoning of moving from WOCAT QM data to the design of suitable and sustainable future options to address land degradation problems. Again the concepts are illustrated with data from the Nama Karoo in South Africa.

Proposal of a simplified methodology for systematization of SLM practices for climate change adaptation, based on WOCAT

Janie Rioux

Although WOCAT is recognized as a strong tool for the documentation and assessment of SLM practices, the extensive work required to document a practice makes it less useful. FAO RLC with Universidad Técnica Federico Santa María (USM) are developing a simplified methodology based on WOCAT questionnaires and case study summaries, that incorporates the climate change adaptation module and which be more easily completed to facilitate its use by farmers and field technicians.

The proposed questionnaire is fully based on WOCAT, easy to use and optimized to use on mobile IT equipment (laptop, tablet, smart phones), which can be used directly in the field. Is not a "light" version. The experts -especially those with WOCAT experience- have proposed many adjustments to the questionnaires and database design with the aim of developing a comprehensive yet synthetic and easy-to-use tool. The output of the method will be the classic WOCAT summary sheets, adding to it the climate change component.

Plans for the second semester 2013 (Phase 2 of the project) include the development of a more practical and intuitive version of the database, improved digital questionnaires and a user manual, as well as a WOCAT App for smart phones and tablets. Furthermore, it is planned to expand the network of specialists and document more case studies in Latin America

Group work on: audio-visual messages from land users to land users and Success stories of WOCAT use and how to promote WOCAT-LADA methods and tools further

Nicole Harari, Isabelle Providoli

The session focused on gathering experiences and feedback from participants on the use of video and WOCAT tools in their countries and/or regions through group work. The session was divided into three parts.

PART 1 – use of video (group work)

- Your experiences in using video to share SLM knowledge?
- Can video be useful to reach land users in your country/region?
- If yes, how? (advantages/constraints)

African and Near East Group

- ICARDA has produced a short movie on SLM which includes information about the WOCAT tools used. The video was shown to 2-3 communities in Syria before the political unrest and is available on youtube. ICARDA noticed that the visual aspect is very much appreciated by land users, however, the production of videos is very costly.
- In Ethiopia SLM video documentation for mass mobilization is available. The main problem faced is that videos need to be translated into local languages for the main target audience the farmers/beneficiaries.
- In Senegal the MoA has produced a ten minutes video on SLM for TV to raise awareness and sensitize about SLM. However, this was done on a national level and the video was very general and not adapted to the issues faced in a specific area.
- In Kenya the MoA division of natural resources has produced a video on SLM for broadcasting on radio and TV. They also made CDs and DVDs available.
- The group mentioned that in certain countries it is difficult to find good video producers. The group's suggestion is to find 'model farmers' who demonstrate a certain SLM practice and show great motivation. Their video could then be used for broad dissemination and convincing other farmers.

South African Group

The group mentioned the following advantages and disadvantages with regards to the use of video:

- Video is useful in support of a written guide
- Video is useful to take information from one area to another (used by Landcare) → can be applied in similar situations
- People are often more willing to watch than to read. Video can reach many stakeholders.
- Video is time-saving and shows the real field situation
- For certain farmers video can be either too simple or too complicated (depends on level of technical knowledge)

Asian Group (Bhutan, Central Asia, China, India, Nepal and Philippines)

In India over 100 videos have been produced on SLM and distributed to villages, some are available on youtube. In Nepal video clips were produced and shown during SLM related trainings, seminars and meetings. Also in the Philippines and in China some videos were produced showing SLM technologies and approaches. In Bhutan a documentary was produced on general SLM and one on a particular land management campaign.

The group mentioned the following advantages and constraints of using video:

- Reaching wide audiences
- Visualization is better than imagination – more effective and more motivating
- Real stories from real farmers, showing real activities, can capture more trust
- Professionals are needed to produce the videos
- Expensive and time-consuming

PART 2 – inventory and ideas (group work)

- Create an inventory of the most unique SLM Technologies and Approaches in your country/region.
- For which Technologies/Approaches would it be useful to have *instructional videos* for knowledge sharing with land users?

African and Near East Group – Inventory

- Kenya: Approach: Demonstration plots and model farmers. Motivated and progressive farmers act as catalysts; Technology: Fanja Juu terraces on Cropland and in humid AEZ
- Senegal: Approach: participatory community approach for SLM; Technology: land use improvements (amendement des terres/ amélioration du sol) on Cropland and Grazing land in drylands
- Ethiopia: Approach: LLPA (local level participation planning approach) for mass mobilization in watersheds; Technology: sediment storage dam on grazing land in dry as well as humid AEZ.
- ICARDA: Approach: micro credit/finance system for SLM (Syria); Technology: Valerani (plough) for water harvesting and soil fertility improvement on grazing land in dry AEZ; Area closures (e.g. rangeland closure) on grazing and forest land in dry AEZ; Raised bed technology (Egypt) on irrigated Cropland in drylands; Zai planting pits for water harvesting on Cropland in drylands.

South African Group – Inventory

Technologies	Approaches
<ul style="list-style-type: none"> • Permaculture • Rotational grazing and water points • Bush encroachment • Vetiver grass for erosion control • Erosion control structures (material and green engineering structures) • Runoff control • Minimum/zero tillage • Stone mulch • Success story: sand box 	<ul style="list-style-type: none"> • Landcare programme • 'Working for' programmes • Stewardship programme (biodiversity) • Farmer field schools • Water taxation on crops and plantations • Study groups • Mentorship

Asian Group – Inventory

- Central Asia: joint pasture management in Kyrgyzstan, joint forest management in Tajikistan
- India: Watershed management in dryland areas, afforestation of indigenous plants, biodiversity hotspots mapping, DRR hotspot mapping, weather based agro-advisory
- Nepal: land terracing, river-bed farming, community forest management
- China: agro-forestry with shelterbelts, wolf berry (lycium) plantation in saline areas
- Philippines: Ifugao rice terraces (one of the globally important agriculture heritage systems)
- Bhutan: participatory SLM action planning, land management campaign, participatory NR mapping, labour sharing group
- Instructional videos for knowledge sharing on:
 - Watershed management in dryland areas
 - Joint pasture management in Kyrgystan

PART 3 – success stories (group work)

- Ingredients of successful application of WOCAT-LADA tools in projects
- Ingredients of successful fundraising
- Up-scaling successes, concrete steps in using WOCAT-LADA tools
- Bottlenecks and challenges

African and Near East GroupIngredients of successful application of tools:

- Demand-driven
- Clear message, simple demonstration
- Cost/benefit analysis
- Training and awareness

Ingredients of successful fundraising:

- Advocacy
- Proven impacts on environment, land and livelihoods
- Multi-disciplinary and integrated
- Community-based
- Contribution to MDG

Up-scaling successes, concrete steps in using WOCAT-LADA tools:

- Awareness at various levels
- Policies
- Packaging
- Acceptability

How to use the tools?

- Reducing land degradation through guiding regulation (policies)
- Adoption of SLM from WOCAT to similar areas and monitoring
- More outreach to farming community (not only on computers)
- Mainstreaming (institutionalizing) WOCAT in the mandate of the MoA (national)
- Education, capacity building, training, awareness
- Grouping of countries based on agro-ecological conditions
 - Ethiopia: use the technologies in the SLM projects, selection of suitable SLM, participatory planning approach
 - Syria: use some material from WOCAT to produce dissemination material
 - Tunisia: database to monitor land degradation, promoting SLM

Bottlenecks and challenges:

- Budgets
- Technical know-how → solution: training of trainers
- Lack of awareness
- Identify areas with high priority

South African GroupIngredients of successful application of tools:

- Good technical team
- Multi-disciplinary team
- Good baseline data (either collected or already in place)
- Good understanding of both natural and social systems and what you want to achieve and how WOCAT could get you there
- Adequate resources for the size of the project.
- If limited resources, start small and build on existing efforts
- Know the strengths and limitations of WOCAT tools
- Equal benefits to all WOCAT users and related stakeholders

PLUS: personal commitment: a dynamic person that carries the project

Ingredients of successful fundraising:

- Knowhow to write a proposal, proposals should be country driven
- Sustainability has to be demonstrated
- Community engagement
- Proposal must be realistic, funds must match requirements
- Must include mutual benefits to all parties, partnerships
- Time frame and deliverables must be realistic
- Keep to time frames
- Need to know and understand your sponsor (donors goals) in order to ensure mutual subject interest

Up-scaling successes, concrete steps in using WOCAT-LADA tools:

- Identify clear objectives
- Identify and involve relevant stakeholders
- Get buy-in from stakeholders
- Identify existing data sources relevant to the proposed WOCAT project
- Identify data gaps
- Determine methods to close data/capacity gaps and relevance of WOCAT tools
- Draw up an implementation plan
- Implement the plan to include continuous monitoring, evaluation and feedback
- Plan for follow-up and up- and out-scaling
- Address ownership issues

Bottlenecks and challenges:

- Stakeholders: what is in for me?
- Official bureaucracy

Asian Group – missing, no information available

2.2 WOCAT PROGRESS (GLOBAL/NATIONAL LEVEL)

Chair: Godert Van Lynden, Rapporteur: Isabelle Providoli

National progress / Poster market



Presentations of national progress / poster market (Photos: WOCAT Secretariat)

Asia

Afghanistan (did not attend WWSM)

Institution: HELVETAS SWISS INTERCOOPERATION, Afghanistan

Contact person: Mohammad Khalid Azami (khalid.azami@helvetas.org), Deputy Country Director

Progress report July 2011 – June 2013

- During this reporting period, Sustainable Land Management Institute, which is funded by the Swiss Agency for Development and Cooperation, organised 3 practical and paid training courses on WOCAT tools and methods, including one training course on WOCAT mapping, with the help of external resource persons from ICIMOD (Mr. Madhav Dhakal), South Africa (Mr. Lehman) and from India (Mr. Sanjeev Bhuchar).
- About 50 persons from about 15 organisations were trained through these practical training courses.
- Documentation of AFCAT fact sheets has also started. Up to now, thirteen technologies and approaches have been evaluated and reviewed. Based on the four page WOCAT templates, the AFCAT facts sheets have been already developed.
- HELVETAS SWISS INTERCOOPERATION has applied mapping tools for developing community based watershed Master plans.
- Approximately 30,000 USD were spent on the AFCAT initiative, which includes contributions from members as well, particularly the International Centre for Integrated Mountain Development or ICIMOD.

Work plan July 2013 – June 2015

- Based on a mid-review of SLMIO by SDC in 2012 and an assessment of SLMIO's institutional progress by PRIA (India), it was decided that from April 2013 onwards HELVETAS SWISS INTERCOOPERATION will take full responsibility of executing the Sustainable Land Management Institute mandate from SDC. This includes the AFCAT component as well.
- As per the plans of this "SLM" Project, two more trainings on WOCAT tools will be organised for about 40 professionals during 2013/2014 by HELVETAS SWISS INTERCOOPERATION.
- The existing 13 case studies will be published and 12 more AFCAT fact sheets from the Central Highland region of Afghanistan prepared by 2014 end.
- An AFCAT Central Highlands database on documented case examples will be also established and linked to national AFCAT and WOCAT database.
- For promoting SLM, 2 AFCAT promotional workshops will be organized at sub-national and national level for managers and policy makers.

Bhutan

Bhutan became an official partner in the regional Himalayan Conservation Approaches and Technologies (HIMCAT) network in 2008 (but need to sign formal MoU). The National Soil Services Centre (NSSC) of the Department of Agriculture under the Ministry of Agriculture & Forests (MoAF) is the national partner institution. In 2008, a group of Bhutanese officials were trained by ICIMOD staff on the basics of WOCAT documentation. This marked the beginning of HIMCAT/WOCAT in Bhutan, but the actual documentation of approaches and technologies started only in 2010. Over the past two years, Bhutan has documented 12 approaches and 13 technologies. Although the BHUCAT (Bhutan Conservation Approaches & Technologies) initiative has been published and widely disseminated in-country, it is yet to be uploaded on to HIMCAT/WOCAT online database for international audience. The aims of BHUCAT initiative are to: 1) document and share best Soil & Water Conservation approaches and technologies, and 2) serve as the knowledge management & decision support tool. In the coming years, these documented best approaches and technologies will be validated and new additional will be documented.

China

Institution: PRC-GEF Partnership on Land Degradation in Dryland Ecosystems

Contact person: Zengming Song

Progress report July 2011 – June 2013

- Published Best Practices for Sustainable Land Management in Dryland Areas of China II (in EN and CN).
- Review the draft 3 times, for EN version, we contracted with WOCAT Secretariat to improve the format and detailed information;
- Analyzed Land Degradation and SLM in China, the related information about 45 technologies and approached in volume I and volume 2;
- Circulated the Best Practices for Sustainable Land Management in Dryland Areas of China II (in EN and CN) Volume I and Volume II in several international conferences, especially in the International Conference on Sustainable Land Management Practices and Policies.

Workplan July 2013 – June 2015

- Discussion on how to promote the input into the global database;
- Conduct training on QM;
- Linkage SLM and biodiversity conservation in pilot provinces;
- Promote WOCAT-LADA tools application in global environmental benefits monitoring, especially carbon sequestration and biodiversity conservation.

CALCIM

Institution: GIZ regional programme for sustainable use of natural resources in Central Asia

Contact person: Alona Reichmuth.

Progress report April 2011 – June 2013

During 2011-2012 GIZ regional programme in cooperation with CACILM¹ Multicountry Capacity Building project has selected and documented 23 SLM practices which proved their effectiveness in Central Asia. The SLM experience was gained from the CACILM projects, GIZ projects and other SLM-related projects in Central Asia and covered following thematic areas: pasture management, forest management, wildlife management, arable land management and energy efficiency (access to thermal insulation) in five Central Asian countries. All SLM best practices were posted in the WOCAT online database in English and Russian languages.

Distribution of practices by countries: 5 practices by Kyrgyzstan; 4 practices by Kazakhstan; 5 practices by Tajikistan; 3 practice by Turkmenistan; and 6 practices by Uzbekistan.

During 2012-2013 these set of practices was complemented with 5 additional SLM practices.

They are as follow: (1) One documentation of "Joint wildlife management in the mountain ecosystem of the Naryn region of Kyrgyzstan"; (2) four additional documentations of technologies and approaches complemented two approaches on sustainable pasture management which were documented in 2012 and now we have a comprehensive description of sustainable pasture management in Kyrgyzstan (Naryn oblast) which consists of 6 documentations.

Up to now there are 28 SLM practices on the WOCAT on-line DB and 15 practices among them were generated in GIZ projects in Central Asia.

Workplan July 2013 – June 2015

GIZ regional programme is going to develop and publish a Calendar for 2014 under the title 'Activities of the Regional Programme through a prism of WOCAT' in which all 15 GIZ SLM best practices will be presented.

GIZ regional programme participates in the PPG phase of GEF-5/FAO Project "Sustainable management of mountainous forest and land resources under climate change conditions" (Kyrgyzstan). The GIZ Regional Programme is going to contribute to the project implementation trying to convince the project staff to use CACILM pilot experience which has been documented in WOCAT. The second aim is to introduce WOCAT tools into project implementation process in order to use them for documentation of new experiences which will be gained during project implementation.

ICIMOD

Country: Nepal

Institution: ICIMOD

Contact person: Madhav P. Dhakal

Progress report July 2011- June 2013

The NEPCAT fact sheets series 2 containing 22 SLM practices (14 technologies and 8 approaches) has been uploaded into NEPCAT web site (<http://www.icimod.org/nepcat>) with the technical and financial support of ICIMOD.

In case of NEPCAT second series, rather than printing the whole set of case studies with folder as was done in the past, ICIMOD has decided to handle the material as a website of NEPCAT best practices, in which each 'fact sheet' is a page. This approach will simplify future revision; pages could be updated as new material becomes available. The future material could be released piecemeal, as parts are finalized. CDs could easily be made to disseminate the content to readers lacking electronic access; and partners could translate into local languages from the electronic version. The contents of each fact sheet were internally reviewed at ICIMOD to meet prescribed standards for accuracy and completeness.

NEPCAT fact sheets series 2 is the product of collaborative effort of various organizations and institutions working in the field of land management and it is inspired by WOCAT's 'Where the land is greener' overview book. The contributors of NEPCAT fact sheet series 1 were Sustainable Soil Management Programme (SSMP) and International Centre for Integrated Mountain Development (ICIMOD) where as the contributors of fact sheet series 2 are various GOs, INGOs and a university working in Nepal including Department of Soil Conservation and Watershed Management (DSCWM), HELVETAS Swiss

Intercooperation-Nepal, Sustainable Soil Management Programme (SSMP), International Development Enterprises (IDE-Nepal), Local Initiatives for Biodiversity Research and Development (LIBIRD), Kathmandu University (KU), and International Centre for Integrated Mountain Development (ICIMOD).

The watershed module was tested in 2012 by Kathmandu University with the financial support of ICIMOD in the Durlung sub watershed of Koshi river basin and in the whole Koshi river basin. The main objective of the field testing was to find gaps in the questionnaires of watershed module prepared by WOCAT. The questionnaire frame was sampled with many stakeholders of watershed management such as soil and water conservation worker, activist, authority and local people. This was obtained on the basis of several meetings at authority level and Focus Group Discussions (FGD) in the community level. Web sites were the best source of data collection and personal contacts were also used as much as a possible. Gap in the questionnaire was found with the challenges faced to get data and limitations of the pilot program. The report was shared with ICIMOD in 2012.

Training on "Documentation of the Sustainable Land Management (SLM) technologies and approaches using WOCAT method" was organized in Afghanistan (December 2012) jointly with Sustainable Land Management Institute Organization (SMLIO). Sixteen SLM professionals from different organizations and institutions including Provincial Bamyan Government, Solidarités International, Bamyan University, Aga Khan Foundation, DAIL- Bamyan, Agriculture institute, SLMIO, GIZ-DETA Takhar, Catholic Relief Service, and Economy- Bamyan have been trained on WOCAT methods in Afghanistan. AAFG has come up with fact sheets containing 5 technologies and 3 approaches.

The HIMCAT extranet site is maintained and continued. HIMCAT newsletter was published and shared among network partners in the second half of 2011. It was discontinued afterwards due to the availability of time. The extranet site is still not too active and the contributions from members are limited.

Workplan July 2013 – June 2015

Most of the good practices documented in 2011-2012 (that are available in the NEPCAT fact sheet-2) are not yet entered into the WOCAT global database as many contributing partners followed a short cut method to prepare fact sheet, those remaining Ts and As will be entered into the WOCAT database.

ICIMOD, through its Landscape Management Program has implemented a Kailash Landscape Management Initiative in Mt. Kailash area (Nepal, India and China) in which SLM will be a key component for longer term. Documentation of good practices (indigenous as well as project implemented) from the different land uses (forest, rangeland, agriculture etc) will be an activity of the initiative with promoting the WOCAT tools and method.

Similarly, one of the regional programs of ICIMOD, Adaptation to Change, will start testing various good SLM practices in a sub watershed level in Myanmar. Tested options and innovations will be documented together with existing indigenous good practices. All available good practices will be compiled as "MYACAT fact sheet". WOCAT tools and methods for documenting SLM practices will be introduced and promoted.

Climate Change adaptation module prepared by WOCAT will be tested with a Ph.D student in the middle mountains of Nepal.

ICIMOD, as being a focal point for the HIMCAT network, will organize trainings on "Documentation of the Sustainable Land Management (SLM) Technologies and Approaches using WOCAT method" with its partners on a demand basis.

The HIMCAT extranet will be continued and further activated. New information from the HIMCAT countries will be included on the website and it is updated.

Joint proposal development and securing fund for implementing SLM project in the HKH region is required to internalize the WOCAT methods and tools in partner's activities, projects and knowledge management plan. Proposal writing and securing fund will be an activity of HIMCAT.

India

Institution: Watershed Organization Trust

Contact person: Girish Jathar

Work-plan July 2013 – June 2015

We would explore the possibility of integrating WOCAT with P3DM (Participatory 3 Dimensional Modelling) +ALCES (A Landscape Cumulative Effects Simulator). Having carefully looked at WOCAT we are of the opinion that strong synergies should exist with such integration.

WOTR will pursue funding for the said innovation. The integration process shall be undertaken subject to availability of the funds.

Philippines

Institution: PHILCAT thru the Bureau of Soils and Water Management

Contact person: Samuel M. Contreras

Progress report July 2011 – June 2013

The PHILCAT continued its efforts on the promotion, awareness-raising, advocacy campaign, and research and development on soil and water conservation and management through various programs and projects. The participation of member-institutions was strengthened and quarterly meetings were held regularly. One of the important decisions made was the hosting of WOCAT-ASOCON workshop held on March 26-28, 2012. During the workshop, the WOCAT knowledge management platform was introduced to the participants. A parallel workshop on the Philippine LADA project was also undertaken in the same venue which provided Asian participants a chance to understand the project and interact with the local LADA technical working group members. During the period, two (2) institutional visits from Bhutan were also hosted to showcase some of our experiences on SLM.

The WOCAT tools and methodologies (i.e. QM in particular) were applied in the on-going LADA project through which the first version of LUS map for the Philippines was prepared. WOCAT was also featured in the BSWM 2012 4th Quarter newsletter "Soilscape". A project proposal entitled "Development of Decision Support Tools on SLM as a Key to Address Abiotic Stresses in Areas Vulnerable to Climate Change" that will fully use WOCAT tools and methodologies was prepared and approved during the period. WOCAT tools were also introduced to facilitate the documentation of SLM and biodiversity-friendly agricultural practices. However, the broader application of the tools remains a challenge and the approved proposal that will engage more stakeholders at the local level is still awaiting for the release of funds.

Workplan July 2013 – June 2015

PHILCAT members will continuously pursue their efforts on the promotion and adoption of WOCAT Knowledge Management tools to document, package and disseminate best practices on SLM and biodiversity conservation. This will be in line with the implementation of on-going projects which include; a) the establishment of soil conservation guided farm, b) sustainable corn production in sloping lands, and c) mainstreaming biodiversity conservation into the local agricultural landscapes. Documentation and up-scaling of best practices are important components of these projects to facilitate broader adoption at the grassroots level. As such, WOCAT tools and methodologies will be proposed for adoption to facilitate the process. The work plan also considers other relevant activities such as farmers training and institutional capacity building, technology demonstration, national action plan (NAP) alignment process (i.e. with knowledge management as one of the elements), and mainstreaming and up-scaling of SLM through the global project "Decision support for mainstreaming and scaling up SLM".

Yemen

Institution: Agriculture Research & Extension Authority

Contact person: Ahmed Algalal

Progress report July 2011 – June 2013

The Republic of Yemen in partnership with Food and Agriculture Organization (FAO) held a national training workshop on Land Resources Management & Introduction to LADA-WOCAT methods and tools to key stakeholders. The workshop was held on March 9-13, 2013 in Sana'a. 16 persons from: Agricultural Research and Extension Authority, Ministry of Agriculture and Irrigation, National Water Resources Authority/ Ministry of Water & Environment, General Directorate of Irrigation Structures, Faculty of Agriculture/ Sana'a University attended. As a result of this workshop 8 technologies and 5 approaches were identified to be documented using the WOCAT tools.

Workplan July 2013 – June 2015

- Flow up of WOCAT Activities in concerning institutions + intensive training □ Meetings with participants of last workshops
- Documentation of local knowledge (QT QA, QM) □ Documentation of 20 approaches, technologies and mapping in different ecological regions in Yemen
- Providing of Yemeni techniques in the WOCAT's website □ Data analysis and interring to WOCAT database
- Writing the text □ Preparation the report
- The important of WOCAT for SLM and Displaying the output of activities □ Conducting thematic workshop for decision making in concerned institutions, NGO.s, researchers and academic specialists

Africa

Ethiopia

Institution: Ministry of agriculture SNNPR, AWASSA

Contact person: FREHIWOT DESTA

Progress report July 2001 – June 2013

Introduction

Ethio cat was established on a National workshop conducted in the city of Nazareth, in 2001, whereby, the responsibility given to the ministry of agriculture by workshop participants.

Challenges

- Currently There is no WOCAT Person Assigned in Federal level
- Budget shortage to document other WOCAT QTs and QAs
- Mountains and sloppy Nature of the Country
- Shortage of budget to tackle all land degradation and Environmental problems

Major achievements

In 2002 training have been given for 78 SLM specialists. Around 52 wocat technologies and 27 approaches have been documented for Ethiopia in past years.

One overview SLM technologies and approaches book for Ethiopia has been published.

Outlook with respect to challenges

- Ethio cat should be institutionalised and should be able to bring new organizations and institutions under this network and build their capacity through awareness and training programs.
- The Ethio cat should be strengthened and has to publish more promising SLM technologies.
- Ethio cat should design effective methods and procedures to disseminate wocat knowledge to the grass root level land user
- To solve budget problems Wocat International should allocate some seed money for Wocat QT and QA documentation for SNNPR, ETHIOPIA.

Workplan July 2013 – June 2015

In 2013 - 2015 The wocat activates planned to be carried out in southern part of the country

- Three wocat technologies will be documented in SNNPR Region
- 2 wocat approaches will be documented in SNNPR Region
- Trainings will be given on wocat QTs and QAs For Zonal and District ministry of agriculture SLM staff in SNNPR Region of Ethiopia

ICARDA

Contact person: Feras Ziadat

Since 8 years SLM technologies are being developed and tested in benchmark and satellite sites to improve productivity and livelihood. Examples:

Rainfed Benchmark: supplemental irrigation (Morocco)

Rangeland Benchmark: water harvesting (Jordan)

Irrigated Benchmark: raised bed techniques (Egypt)

After 8 years it is time to out-scale proved technologies and best bet practices (SLM) to other larger areas. Therefore an action plan that guides and provides detailed course of action for training SLM specialists in the use of WOCAT-LADA tools needs to be developed for the region. This plan will include

- formalization of national & regional SLM platform (focal points)
- finalization of national (sub-regional) detailed action plans (with timeline) for using the tool
- documentation of technologies and approaches and their spread (QT, QA and QM)
- support and backstopping of the documentation process
- provision of decision support at local / regional level
- identification of knowledge gaps for research
- institutionalization and mainstreaming of up-scaling of SLM best practices
- mobilization/optimization of resources among various institutes

Kenya

Institution: Kenya Agricultural Research Institute (KARI), Jomo Kenyatta University of Agriculture and Technology (JKUAT), Pro-poor Rewards in Environmental Services in Africa (PRESA) Project

Contact person: Kahiga Paul, (mathaiya_kahiga@yahoo.co.uk)

Progress report December 2011 – June 2013

- A Decision Support (DST-MATSIM) Tool conceptualised and developed
- A manual for the DST-MATSIM Tool, under development
- Twenty seven (27) technologies (QTs) in the upper Tana Catchment identified for documentation
- A survey of the Sustainable Land Management Technologies (SLMs) used in the upper Tana Catchment done
- Leaflets/brochures production for the identified technologies (whether documented by the use of WOCAT frame work or otherwise conceptualised) under production

Workplan July 2013 – June 2015

- Validation of the DST-MATSIM Tool
- Enhancement of the documented Upper Tana catchment SLMs and input to the global and DST-MATSIM Tool database
- Finalising and publishing the DST-MATSIM Tool technical manual and loading it to the tool
- Production of leaflets/bronchures and publishing of the selected SLMs from the upper Tana Catchment
- Documenting other technologies in the Upper Tana catchment that were otherwise not documented during the first phase and incorporating them in both global and DST-MATSIM Tool.
- Attending national agricultural exhibitions/fairs

- Publishing a book on sustainable land management practices for enhancing ecosystem services and climate change adaptation for the upper Tana catchment basing on my experiences on WOCAT methodology

Senegal

Institution: Institut National de Pédologie

Contact person: Ndeye Sokhna FALL/ Ndene Lo

Progress report December 2011 – June 2013

- 9 Technologies documented: Dike Antisel, System Gabions and fascines, Bunds, Plant Nursery/ a forestation, Amendment / parcase, Water dam, Dig of ponds, Public postage and restraint
- 2 Approaches documented: Participatory local Approach, Project Approach
- WOCAT trainings: Workshop establishment of regional committees SLM and training of local actors WOCAT tools
- Networking activities: Meetings of the Technical Committee for the establishment of Information System; Development Information System

Workplan July 2013 – June 2015

- The network SENCAT wants to involve the maximum players of SLM, this system of information on technologies and approaches SLM is an excellent means of communication and sharing of experiences. The development of the system is completed, now they wait to find a host to put the website online.
- The SENCAT plan to visit the Sahel countries in case to increase there awareness of the opportunity to establish a regional system of exchange and sharing strategies for sustainable land management. A workshop presentation and outreach methodologies WOCAT will be held at the end of all visits to establish a good wait for starting the regional network.

South Africa

Institution: Department of Agriculture, Forestry and Fisheries

Contact person: Lehman Lindeque

Progress report July 2011 – June 2013

- Meetings with potential stakeholders to implement WOCAT in South Africa – meetings completed but no formal agreement due to restructuring to WOCAT International and lack of funding at Department of Agriculture, Forestry and Fisheries.
- Preparation and successful hosting of WWSM in Pretoria, South Africa
- Development of Decision Support System and products for informed decision making based on WOCAT/LADA QM data collected during LADA National Assessments – progress and results to date reported on during a presentation at WWSM 16 in Pretoria. This is work in progress and will continue in next reporting cycle
- Adjust WOCAT QM Matrix with 5 new variables specifically for an assessment of National Parks in South Africa.
- Introduce WOCAT Tools to the Drylands Conservation Programme in South Africa, coordinated by the Endangered Wildlife Trust in South Africa.
- Provide training on behalf of Helvitas Swiss Interoperation on WOCAT QM for Academic, technical and project staff in Afghanistan

Workplan July 2013 – June 2015

- Discussions with Department of Agriculture, Forestry and Fisheries to sign partnership agreement with WOCAT International and make our WOCAT involvement part of the formal NRM Structures within the department.
- Meetings with potential stakeholders to implement WOCAT in South Africa.
- Continue with development of Decision Support System and products for informed decision making based on WOCAT/LADA QM data collected during LADA National Assessments.
- Involvement in QT, QA, QM Training and further development as requested by different stakeholders.

New initiatives

UNCCD

The secretariat would like to facilitate the establishment of a global network on SLM best practices, supported by an online platform to facilitate access to data, information sharing, validation of data and development of decision-support tools.

The network and the platform would be established by a lead institution selected among those that participated in the UNCCD call, and financially supported by interested partners including the GEF. The other institutions would contribute with their expertise, data available and their respective networks.

Data on SLM best practices compiled by the secretariat through the PRAIS will be transferred to the lead institution/network once a decision is taken at COP 11, the data access policy is available and under the guidance of the CRIC Bureau.

Mapping best practices on SLM: Possible collaboration with Google on a land degradation mapping/best practice platform that will use Google information resources and available remote sensing data, in order to identify hot spots of land degradation and tag best practice.

Afromaison

Contact person: Ethel Pirola Igoa

WOCAT in AfroMaison

Two of the case studies have used WOCAT tools as a source for identifying and describing sustainable land management (SLM) interventions: South Africa and Ethiopia.

In the case of South Africa, the process of identifying and selecting the SLM interventions involved local stakeholder participation through interactive workshops. The case study team, *Institute of Natural Resources*, facilitated the process to identify key NRM issues and challenges in conjunction with stakeholders through a broad stakeholder workshop and refined further through small focus group workshops with the use of role-playing games as a participatory research tool. On the basis of these outputs, what was felt to be the most appropriate suite of SLM interventions for the case study area were identified and documented.

The SLM interventions were drawn largely from the WOCAT Databases and WOCAT reports on sustainable land management technologies, supplemented with other documents and inputs from local experts who have implemented SLM in the study area.

The interventions were broadly categorised according to where their focus lies. Key themes for the SLM interventions are:

- Improved grazing and rangeland management: rotational grazing, reinstating herders, alternative fodder systems, cut and carry system, reduction in stock, fire management.
- Rehabilitation and restoration measures: contour bunds and ridges, contour trenches, terraces, trash lines, vegetation strips, gulley cutting, gulley plugging, exclusion zones, revegetation, mulching, footpath planning, protection and restoration, invasive vegetation control.
- Sustainable agricultural practices: agroforestry, conservation agriculture, liming.

These were then presented at a final stakeholder workshop for refinement and adoption. This component of the project will feed into subsequent phases by helping to inform what financial instruments are best suited to facilitating the adoption and application of the identified SLM technologies and will feed into the Municipal planning processes, specifically the Environmental Management Framework.

The case study of Ethiopia is very similar, where the *International Water Management Institute* has used WOCAT tools to facilitate the identification and description of sustainable land management interventions with local stakeholders for integrated natural resources management and helped embed them at regional planning level.

One of the case studies is even actively involved in WOCAT: they have contributed with examples to the online database; and were part of the LADA study. This is the case study of Tunisia.

Within the framework of another EU funded project DESIRE (www.Desire-Project.eu) and parallel in AfroMaison, the case study team *Institut des Regions Arides* contributed actively to WOCAT databases and tools as follows:

Database on Sustainable Land Management Technologies

Six technologies have been documented (in English and French) namely: T_TUN009: Jessour, T_TUN010: Gabion check dam, T_TUN011: Rangeland resting, T_TUN012: Tabia, T_TUN013: Cistern, T_TUN014: Recharge wells

Database on Sustainable Land Management Approaches

One approach has been documented (in English): A_TUN009: Dryland watershed management

Database on Sustainable Land Management Mapping

The SLM mapping database is based on the WOCAT/LADA questionnaire that has been newly developed in 2009. It is still in a development phase, but first data has been entered into the mapping database by the DESIRE study sites including the Tunisian site (Koutine).

AfroMaison: way forward

The ultimate aim of AfroMaison is to contribute to bring research into development, this is, to make science and innovation available to those who should be able to benefit from it. With this purpose in mind, it is the interest of all AfroMaison partners to disseminate the results, procedures and tools used in the project, both existing and being developed in the project, to the wider natural resource management community, using existing platforms to exchange experiences, giving trainings on the outcomes of the project and linking to other toolboxes to contribute to diffuse best practices for integrated natural resource management. The guidance document that will result at the end of the project will propose approaches to INRM and will promote the use of tools and toolboxes, amongst others, the WOCAT toolbox.

Chile (FAO RLC)

Institution: FAO RLC

Contact person: Benjamin Kiersch (benjamin.kiersch@fao.org), Meliza González (meliza.gonzalez@fao.org)

Progress report July 2011 – June 2013

In 2011, RLC made the first translation of the Climate Change WOCAT module to Spanish, which has not been reviewed or edited. So far English version is still the official version.

In 2013, in a joint effort with Technical University Federico Santa María from Chile we developed a systematization methodology based on WOCAT, with a focus on climate change adaptation and appropriate for the characteristics of Latin America. In May, a workshop with regional experts with previous experience in the WOCAT methodology or experience in the systematization of practices was held, and as a result we have adjusted the proposed methodology. This adjusted methodology is a reduced and merged version of original technologies questionnaire plus climate change and mapping modules. The new questionnaire replaced some extensive questions with digital elements, such as multiple choice options. Finally, this version was used by the experts to collect 12 local practices.

Workplan July 2013 – June 2015

From July to December 2013 RLC is working on a regional publication with the methodology proposed, guidelines for using the new questionnaire and local practices from six countries.

In addition, RLC is developing a strategy for a deeper discussion of the proposed methodology in Latin America (mainly through sub-regional workshops) that allows to refine the proposal and promote the use of this methodology in the region.

Also, we need to translate the proposal to English for further and wider discussion, and to create a digital application for the questionnaire (WOCATapp or similar).

Review global progress and vision (plenary presentation)

Secretariat and Global Management review - CDE

Report by Rima Mekdashi Studer (1_CDE_Global progress report.pdf)

WOCAT external review 2008-2011

The objectives of the review were to assess the relevance of WOCAT to development needs and priorities, the overall performance of the programme during the program phase 2008 – 2011, its institutional set-up and management, its cost-efficiency and funding strategy, and to make recommendations for its future development and financing mechanisms.

The main findings were that the WOCAT network has been growing constantly and is even outgrowing its current organisational structure. With the collaboration of FAO-LADA, FAO-TerrAfrica, DESIRE and WB-PPCR the WOCAT knowledge base has been considerably enhanced during the review period and its methods and tools have been reviewed and further developed to integrate new issues, such as climate resilience and watershed management and decision support at different levels on where to invest and for upscaling of Sustainable Land Management (SLM) good practices. High quality publications were developed together with UNCCD and WOCAT partners on SLM best practices in different regions of the world, such as Sub-Saharan Africa and the Mediterranean, as well as in countries such as Bangladesh, China, Ethiopia, Mongolia, Nepal, Senegal, South Africa, Tajikistan and Tunisia. WOCAT was found highly cost efficient and a one dollar investment from SDC has leveraged on average seven dollars from the WOCAT partners.

Main recommendations were:

- Strong links with development priorities → well positioned to address emerging issues related to climate change and disaster risk reduction, but needs to focus more on policy and institutional challenges to SLM upscaling.
- Improve user friendliness (database, manuals)
- Track use of WOCAT tools, assess uptake
- Develop a light version of the questionnaire on technologies (QT) → easier to adopt as a standard for reporting on SLM best practices to the UNCCD and other multilateral organisations.
- Tools need to be linked to “recommendations” on how to create incentives for SLM and how to access SLM finance → achieve up-scaling of SLM.
- Strengthen dissemination and advocacy strategy → reach out to policy-makers.
- Improve visibility, and start using modern ICT
- More formalized WOCAT membership status
- Institutional status needs to be strengthened → make WOCAT more international and improve access to funding.

For more details refer to the report: WOCAT External Review 2011, Anna Tengberg, August 2011, <https://www.wocat.net/en/network/activities/external-wocat-evaluations.html>

Based on the external evaluation, partner opinion and judgement of management and secretariat the following **key achievements for phase 2008 – 2011** were elicited:

- Over the last 20 years WOCAT managed to become a thriving knowledge management hub for SLM. WOCAT has gained visibility particularly among international and multilateral organisations such as UNCCD, GEF, WB. The WOCAT methods and tools have been used in more than 60 institutions in 50 countries to document more than 470 SLM technologies and 230 SLM approaches and more than 500 practitioners have been trained in the application of the tools.
- Premier platform with potential to help deliver current agendas in SLM, climate change adaptation, Disaster Risk Reduction (DRR) and climate resilience planning. Continuous development of its tools and methods have made WOCAT fit and attractive to meet new challenges, issues and demands / request from network partners
- WOCAT offers a well appreciated and unique standardized methodology and tools for documenting and evaluating SLM approaches and technologies as well as their spread and innovative templates for dissemination of key information of best practices to field practitioners, decision-makers and policy-makers, including the UNCCD and GEF focal points.

- An on-line web portal, open source allows to access and share existing technologies/ approaches/ mapping data and to store country - and project-specific data. The databases are the fundament of data analysis and decision support for up-scaling of good practices and for taking decisions on where to invest.
- The WOCAT publication 'where the land is greener' has triggered the use and analysis of documented information for the publication of regional (e.g. TerrAfrica's 'SLM in Practice') and national 'best practices' books (e.g. China, Senegal, Tunisia) or fact sheets (e.g. Nepal).
- Research undertaken throughout the WOCAT network brings considerable benefits in terms of testing of methods and tools, analysis of the database, capacity building of students in developing and developed countries as well as additional funding.

WOCAT funding over the phase 2008 – 2011 in CHF

Donors	Budget 2008-2011
SDC	1'968'000
Additional funding	
CDE-Zentrum	143'646
University of Berne	15'000
FAO database	16'735
FAO-LADA	78'200
FAO-TerrAfrica	176'000
SOLAW	32'000
UNCCD	12'800
GEF KM: Land initiative	16'285
DESIRE	66'810
PPCR-Tajikistan	39'000
CODEP Mongolia	130'000
Total additional funding	726'476

Exchange rate assumed throughout more or less: 1 USD = 1 CHF

The additional funding amounts to CHF 726'476 which is 37% of the total SDC contribution. In addition to the additional funding which was generated by WOCAT Secretariat the national and regional WOCAT initiatives / partners provided in-kind and in cash contributions. The external WOCAT review in 2011 indicated that WOCAT was highly cost efficient and that a USD 1 investment from SDC has leveraged on average USD 5-7 from the WOCAT partners.

New funding phase of WOCAT, 2012-2015

In December 2011 / January 2012 a new WOCAT phase has been approved by SDC linked to the following tasks:

- to diversify global funding,
- to set up a more institutionalised structure and
- to further develop user-friendly tools and information for up-scaling SLM.

Overall goal: Improve resilience and livelihoods of communities AND improve ecosystem services in areas prone to land degradation through promotion and up-scaling of SLM practices at different levels.

Vision: With a strengthened institutional structure and diversified global funding WOCAT should become a recognised international knowledge hub and decision support (DS) for SLM that provides:

- tools and guidance to countries, regional as well as international institutions and conventions, on documentation and assessment of SLM best practices;
- decision-support system for up-scaling of SLM; and
- guidance on how to create incentives and access financing for SLM up-scaling by using expertise of its network members.

Objectives:

- WOCAT up-scaled and mainstreamed as the world leading platform for KM & DS for SLM at different scales.
- SLM knowledge base globally enhanced and extended to new areas including watershed / water resource management, cc adaptation, biodiversity conservation and new emerging issues.
- Capacities enhanced for SLM up-scaling (understand principles of SLM, use of WOCAT tools, transform knowledge for different users, filling knowledge gaps through research, tools & methods continuously build and developed according to needs and demand).

Key targeted outputs of the new phase:

1. Transition period (2012-2013): the main priority will be on the establishment of WOCAT International:

- WOCAT-International is established and running
- National/regional SLM KM hubs are formalized
- WOCAT network is enhanced and recognized through conferences

2. Consolidation period (2014-2015): focus shifts from institutional to topical issues and demand driven content matters:

- Adapted WOCAT templates for different organizations produced
- User-friendly database operational and accessible to all partners
- A database covering agro-ecological zones & socio-economic conditions world-wide is established
- National and regional SLM inventories, guidelines and maps are published
- Synthesized knowledge with respect to global issues is available
- Products to raise awareness and needs for DS tools are available
- Capacity for using WOCAT tools by major int./reg./nat initiatives build

Main outcomes achieved July 2011 – June 2013

For more detailed information refer to the Global Progress Table in Annex 2B.

Outcome 1: WOCAT up-scaled and mainstreamed as the world leading platform for KM & DS for SLM at different scales.

- Strong emphasis was put on the process of formalizing WOCAT International with the current WOCAT Management partners (CDE, FAO, ISRIC and SDC). In June 2012 the decision was taken to formalize WOCAT International into a simple partnership which will give WOCAT more legitimization to achieve the objectives.
- A business plan and concept note was developed to address and find potential steering committee and consortium partners. A Memorandum of Understanding (MoU) template, framework agreement and bylaws were drafted and legally safeguarded with which membership and partnerships are to be formalized and made binding.
- WOCAT Secretariat put emphasis on finding and convening potential partners at different occasions (e.g. conferences, workshops, meetings). Potential WOCAT International Partners are: SDC, CDE, ISRIC, FAO (LADA-WOCAT GEF proposal, FAO-RNE LTPM initiative), UNCCD ("Identification of primary databases for UNCCD best practices", "Scientific Knowledge Brokering Platform (SKBP)), ICIMOD, ICARDA (up-scaling bench mark experiences), IFAD (Video proposal), etc.

- WOCAT submitted to the UNCCD call “Identification of primary databases for UNCCD best practices” for the thematic topic “Sustainable Land Management (SLM) technologies, including adaptation” in December. The following organizations and institutions expressed interest in supporting the CRIC in the compilation and dissemination of best practices on sustainable land management technologies, including adaptation
 - ENDA - Energy Environment Development;
 - IPOGEA;
 - Sahara and Sahel Observatory (OSS);
 - United Nations Environment Programme (UNEP);
 - World Overview of Conservation Approaches and Technologies (WOCAT)

At CRIC 11, some Parties recommended that information on SLM best practices be consolidated and made available in a centralized best practice repository or through a data sharing initiative to prevent duplication and enable comparisons between countries. In this regard, many Parties called for an integrated approach by leveraging synergies and cooperation among the institutions participating in the call.

WOCAT also showed interest and offered support in creating a UNCCD “Scientific Knowledge Brokering Platform (SKBP)”.

- Collaboration with international, regional and national institutions already using WOCAT methods & tools was strengthened. In addition, discussions with international, regional and national institutions planning to use WOCAT methods & tools in future were continued with: e.g. FAO Latin America regional programme, China GEF project, IAEA, SDC project on DRR and watershed management in Tajikistan, HEKS, Biovision. Ministries in Bhutan and Palestine. In addition new research projects were and will be starting to use WOCAT tools in their research programmes (e.g. EU-Cascade, RECARE, SNIS).
- Discussions with two new regional WOCAT knowledge hubs, the Asia initiative launched through the ASOCON network and the RNECAT initiative launched by the FAO regional Near East office) continued and first trainings were held. The RNECAT initiative includes the Near East, North Africa, United Arab Emirates and Yemen.
- Through its publications (refer to outcome 2) and promotion products WOCAT was able to further raise awareness among SLM stakeholders. New promotion material includes videos, posters and flyers:
 - Trailer on use of video for SLM knowledge dissemination
 - 9 short movies on SLM in Tajikistan (CAMP Forum and DRR workshop, 2012).
 - Video trailers on ‘drought and disaster’ for the High Level Meeting on National Drought Policies Geneva, March 2013 and for the UNCCD CRIC meeting Bonn, April 2013.
 - Instructional videos for SLM practices (supported by IFAD).
 - Flyer and a corresponding poster highlighting potential fields of cooperation between UNCCD, WOCAT and partners on a timeline:
 - Support CST on SLM best practices, reviewing best practices
 - Collaborate in implementing the UNCCD Scientific Knowledge Brokering System
 - Contribute to defining UNCCD impact indicators on SLM practices
 - Collaborate in the development of methodologies and tools for country Party policy makers
 - Develop a common template for reporting SLM best practices



- Further visibility and promotion for WOCAT was achieved through participation at various conferences and events by delivering WOCAT presentations on WOCAT KM and DS. A key event was the Global Soil Week which proved to be an important event for further networking and WOCAT promotion.
 - COP10 Changwon, South Korea, October 10-21, 2011: booth and side event on “KM and DS for SLM - A common global platform for up-scaling of SLM Best Practices”; inputs to five sessions at the Rio conventions pavilion (e.g. PRC-GEF partnership, TerrAfrica, GGWI)
 - Global Soil Week Potsdam, 19 - 22.11.2012
 - UNCCD/WHO/FAO High-level Meeting on National Drought Policies): booth, video and side event: Towards more drought resilience - reducing the human made drought – tapping existing knowledge Geneva, 11-15.3.2013
 - UNCCD CST S-3, 2nd scientific conference and CRIC 11 Bonn, April 9-18, 2013: booth, poster, plenary and side event on “Tools for better SLM knowledge management and informed decision making to address land degradation at different scales – the WOCAT / LADA methodology”
 - China PRC-GEF Partnership International Conference on SLM Policies and Practices Beijing, May 7-8, 2013



Outcome 2: SLM knowledge base globally enhanced and extended to new areas including watershed / water resource management, climate change adaptation, biodiversity conservation and new emerging issues.

- The WOCAT database has been further populated or updated with more than 200 QTs from 32 countries. The highest number was added from Central Asian countries. In addition 62 QAs were added from 10 countries with likewise a strong focus on Central Asia. New technologies which have been documented are among others sand dams in Kenya, water spreading weirs in Chad and the Vallerani system in Burkina Faso. Furthermore, 17 maps have been added to the WOCAT database through the DESIRE project.
- WOCAT and its network partners produced several publications.
 - <https://www.wocat.net/en/knowledge-base/documentation-analysis/global-regional-books.html>;
 - <https://www.wocat.net/en/knowledge-base/documentation-analysis/national-books-factsheets.html?category=14>
 - **‘Water Harvesting – Guidelines to Good Practice’** (publication date 2013)
The guidelines that were mandated and funded by IFAD and SDC introduce the concepts behind water harvesting and propose a harmonised classification system. It gives an overview of 4 WH groups with a selection of good practices presented in the systematic, consistent and standardised WOCAT format
 - **DESIRE overview book**
Desire for Greener Land compiles options for SLM in drylands. The book describes the DESIRE approach and WOCAT methodology for a range of audiences, from local agricultural advisors to scientists and policymakers. Thirty SLM technologies, eight SLM approaches, and

several degradation and SLM maps from all the DESIRE study sites are compiled in a concise and well-illustrated “where the land is greener” format.

- **Tajikistan overview book**

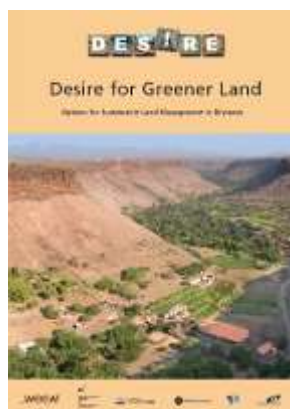
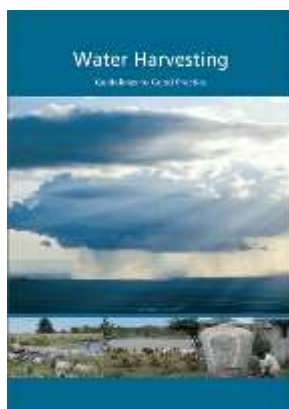
An overview of Tajik technologies and approaches was compiled under the framework of the Pilot Programme for Climate Resilience (PPCR) in Tajikistan. Forty six technologies as well as 24 were presented in the WOCAT 4-page standard format.

- **Best Practices in dryland areas of China II**

China 2nd publication on SLM Best Practices (PRC-GEF partnership) – presents 45 Technologies and 45 Approaches preceded by an analysis of land degradation and SLM in China

- **More national publications**

- Bhutan catalogue of soil and water conservation approaches and technologies
- Nepal 2nd set of fact sheets
- The climate change adaptation module (version 2) has been released through a WB funded project in Tajikistan and is available for testing for other SLM stakeholders.
- A new focus of importance will definitely be DRR, watershed/landscape management and off-site impacts of SLM.



Outcome 3: Capacities enhanced for SLM upscaling (understand principles of SLM, use of WOCAT tools, transform knowledge for different users, filling knowledge gaps through research, tools & methods continuously build and developed according to needs and demand).

- About 250 new users registered through the WOCAT website which shows the interest to gain more knowledge related to SLM issues.
- The WOCAT website has been quality checked and revised by an external person and further WOCAT data management debugging of the online system took place and will be continued. Improvement of website and database (more user friendly) a lot is achieved but still ongoing
- Methods and tools
 - Watershed module was tested in Nepal at different scales (through University of Kathmandu).
 - CC adaptation module tested, revised, Version 2 available also in Russian (PPCR-Tajikistan) and Spanish. <https://www.wocat.net/en/methods/modules/climate-change.html>.
 - The regional FAO office in South America (FAO-LAC) showed high interest to test and adapt the WOCAT climate change adaptation module to own needs
 - DS and DRR at watershed/ landscape level: Mongolian and Tajik experience
 - WOCAT light prototype developed for UNCCD reporting on BP. The aim is to create a unified and harmonized SLM knowledge management platform and to that end develop a common and standardized template for all reporting country parties and reporting entities
 - Enhancement of existing WOCAT knowledge with video and new media for knowledge sharing in SLM that addresses both policy level (decision making) and the vocational level (capacity building). Through the combination with audio-visual information based on local

experiences and scientific knowledge on SLM a powerful package for knowledge sharing and decision making in SLM is being created for use by different stakeholders and various purposes

- Training workshops
 - QT and QA in Palestine Ramallah, Sept 2011 and Feb 2012
 - QM for GGWI Niger, May 2012
 - QM for SLMIO Afghanistan, June 2012
 - NDMS Mongolia (Khovd), September 2012
 - DS at watershed level Muminabad Tajikistan, October 2012
 - QM in Ivory Coast, October 2012
 - QT and QA for RNECAT / FAO-RNE land tenure initiative Cairo, November 2012
 - QT and QA for SLMIO Afghanistan Bamyan, November 2012
 - Training courses for research projects (CASCADE, COST)



Financial resources allocated and expenditures in CHF

Donors	Budget 2012	Expenditures 2012
SDC (personnel for basic enabling activities of network, biannual workshop and steering meetings, promotion and enhancing of network)	432'000	420,538.26
IFAD / SDC (Publication: Water Harvesting: Guidelines to Good Practice)	147,993	84,474.20*
SDC-Mongolia (capacity building for National Desertification Monitoring System project)	34,840	34,840
SDC DRR Programme in Central Asia (Community-Based DRR through Integrated Watershed Management, WOCAT decision support tools)	60,000	60,000
FAO/RNE training workshop on using WOCAT tools	4,770	4,770
SCOPES Project (2 master thesis using the WOCAT tools)	4,000	4,000
NCCR North-South (study "assessing the impact of sustainable land management system on soil property in Crans-Montana region in Valais, Switzerland" using the WOCAT tools)	10,000	10,000
Total	693,603	618,622.46

*Money was spoken for 2012 but the expenditures for the publication will extend into first half of 2013.

Workplan

- WOCAT International set up with at least 5 steering committee partners (a total annual budget of at least CHF1 million and a Secretariat that is fully supported by the Partnership)
- The process of upscaling and mainstreaming WOCAT will be further intensified. MoUs with institutional network members and initiatives signed
- China, Nepal experiences which were published in an overview of best practices book were up to now not entered into the database. The WOCAT secretariat will follow up with these countries to make the effort and find funds for entering their data into the database for more transparency, knowledge sharing and use for analysis and decision support.
- New strategy for WOCAT International
- Explore funding by foundations (consultancy)
- Contracts signed or proposals further developed
- UNCCD: 'Assistance for the development of a framework for the compilation and dissemination of best practices on SLM'
- FAO: LADA-WOCAT global project 'DS for mainstreaming and scaling up of SLM; two short consultancies
- IFAD: large grant proposal 'Rural Livelihoods in Drylands'
- BMBF: grant for the development of a WOCAT type publication
- Cost/ Benefit module in cooperation with FAO (Economics of land degradation ELD call).
- Five instructional videos mandated by IFAD
- Conferences to attend
- Conference on Desertification and Land Degradation 17 & 18 June 2013, Ghent, Belgium
- IAEA/RCA Meeting on the use WOCAT-LADA to assess the efficiency of soil conservation measures 17 – 21 June 2013, Dhaka, Bangladesh
- COP 11, September 2013, Namibia
- Global Soil Week November 2013, Berlin

Outlook consolidation phase

- Adapted templates produced (WOCAT light)
- User-friendly database operational and accessible
- A database covering agro-ecological zones & socio-economic conditions world-wide is established
- National and regional SLM inventories, guidelines and maps are published
- Synthesized knowledge with respect to global issues is available
- Products to raise awareness and needs for DS tools are available
- Capacity for using WOCAT-LADA tools by major internat./ regional/ national initiatives build

FAO

Report by Sally Bunning, FAO Land and Water Division

Review global progress and vision - FAO (June 2011- May 2013)

FAO Framework programs relevant to SLM (196 country members & partners)

- Save and Grow concept - sustainable production intensification (SPI)
- Resilient livelihoods- disaster risk reduction (DRR)
- Climate smart agriculture (CSA)
- Climate change adaptation framework (ADAPT)
- Urban and peri-urban agriculture
- Biodiversity and ecosystem approach

Many technologies and approaches: coping with water scarcity, LADA-WOCAT, drought management, PES, GIAHS....

- Multidisciplinary, cross-cutting, precursors of new results based framework
- Need to integrate and harmonise these concepts
- SLM Ts & As and ecosystems management central to all

Global Soil Partnership (GSP): Land degradation affects soil health

Pillars of Action:

- Promote sustainable management of soil resources and improved global governance for soil protection and sustainable productivity;
- Encourage investment, technical cooperation, policy, education awareness and extension in soils;
- Promote targeted soil research and development focusing on identified gaps, priorities and synergies among economic/productive, environmental and social dimensions;
- Enhance the quality and availability of soil data and information: collection, analysis, validation, reporting, monitoring, integration with other disciplines;
- Harmonize and establish voluntary guidelines of methods, measurements and indicators for soil protection and sustainable management.
- Work started on 1, 2 and 4

Use of LADA-WOCAT tools to support SLM planning & decision making

- Development of LADA-WOCAT Toolbox (LADA project, 2008-2011) →Capacity built and manuals published: LUS, National mapping, LADA-Local
- Near East and North Africa region: Regional training and integration with land tenure and land use planning
- Great Green Wall Initiative multi-partner supported by BRICKS (WB) and FAO/EU/GM
- Sub-Saharan Africa TerrAfrica Programme: sharing through TAEC; Kagera Transboundary agro-ecosystem management project GEF/FAO
- Latin America and Caribbean region:
- Development of combined version QT/QA/QC (RLAC-with partners ; Spanish)
- Adaptation of LADA-local and QM for SIDS with Grenada
- Regional workshop on results with Caribbean countries (2012-3)
- GEF PPG for development of Decision support tools for SLM scaling up and mainstreaming (FAO + WOCAT with 15 countries)

FAO outreach in workshops/events:

- GGWI sub Saharan Africa (FAO/EU) awareness at planning workshop & LADA-WOCAT training workshop
- Other regional efforts (Near East ; LAC ; Asia)

- UNCCD (CST+ CRIC; TerrAfrica): joint booth, LADA-WOCAT side event, materials +manuals est. 25,000 USD
- World Water Day Dublin
- Part of task force for developing Watershed guidelines with Forestry Department 2013 (will liaise with WOCAT on use of tools)
- High level conference on promoting National drought management policies (WMO/FAO/UNCCD) Geneva 2013 + follow up

Planned LADA-WOCAT related activities

- Complete the SLM survey
- Update LADA-Local assessment manual
- Develop light version LADA local (with a mapping tool)
- Support training FAO-RNE
- Support work in FAO-LAC
- Follow up in Caribbean region
- Workshops LADA-WOCAT outreach: Zambia June (Sally), Bangladesh June (Stefan), Cuba July (Riccardo)
- UNCCD COP 16-27 September 2013
- WOCAT International Framework agreement, Review process in FAO: NRL + legal office:

Sustainable Land and Water Management User needs Survey

Report by Janie Rioux, FAO

A number of Knowledge Management (KM) and Decision Support (DS) methods, tools and products have been developed and made available to support actors on a wide range of SLM activities: SLM databases and information systems, websites and programmes, technical publications, as well as trainings and practical learning tools. FAO NRL Land Division team would like to improve and develop more user friendly SLM KM and DS products and tools to support the work of all SLM stakeholders from land users to national decision makers. To assess how to improve SLM services and better support all actors working on natural resources and ecosystem management, a global Sustainable Land Management SLM User Needs Survey was prepared and disseminated.

The purpose of this survey was to engage with all stakeholders working in SLM, including soil, water, crop, grazing and forest management, to obtain better understanding on the use of existing SLM KM and DS methods, tools and products at global, country, local, basin/watershed, regional and district levels. The survey further aimed to identify knowledge gaps and needs for further SLM KM and DS methods, tools and products. In addition the survey aimed to explore how to improve the use and user-friendliness of SLM KM and DS methods, tools and products. The survey was addressed to SLM stakeholders from different regions, including Africa, Americas, Asia, Europe and Oceania. to capture opinions and views of all type of SLM stakeholders, farmers, extension officers, researchers, project/programme managers, policy makers, planners and technical specialists were targeted.

The survey design process was initiated in September 2012 and after a range of consultations with SLM experts the survey was finalized and launched on 08 April 2013 and closed on 06 May 2013. A total of 386 respondents from 98 countries participated in the survey.

Key findings:

- The survey was a global survey, and significant responses were received from Africa, Asia and Europe; however the Americas and Oceania were not well represented.
- A wide range of SLM experts with different roles/functions answered the survey, and especially technical specialists, project/programme managers and researchers (not many policy makers and planners).
- 50% of the expertises are from soil science/land management and environment/natural resources management; however another 50% are from very diverse areas of expertise such as water, livestock forestry, economics and climate change
- 42% of the respondents are part of other SLM network, than the WOCAT network.

- Very little SLM experts use the SLM methods, tools and products for cost analysis and planning investments.
- Most experts used SLM methods and tools at country and local levels.
- Most of the SLM methods and tools are used in cropland, and in arid, semid arid and sub-humid areas (not much in humid zone).
- The results show the need to continue support the documentation and assessment of SLM practices, while opening to new thematic areas such as climate smart agriculture, water, bioenergy, livestock, payments for ecosystem services, and landscape approaches.
- As key priorities, SLM experts need more/improved tools for assessing impacts of SLM on ecosystem services and cost effectiveness and benefits of SLM, among others.

Global Management review - ISRIC

Report by Godert Van Lynden

ISRIC Activities 2011-2013

ISRIC – World Soil information has been a member of the WOCAT Management Team since WWSM1 in Sigriswil, 1996. In this context, ISRIC has been strongly involved in assisting in general coordination of the network, regular feedback and suggestions on methodological issues and in some of the training sessions that have been held over the years.

While ISRIC received some funds for these activities from the WOCAT initially, this was partly replaced by funding from (WOCAT-related) projects such as SOWAP (2005-2007), DESIRE (2007-2012) and to some extent Green Water Credits (various sub-projects on-going). Considerable time was invested from ISRIC core funds. However, since the end of the DESIRE project this option and thereby the amount of funding was decreased, and in the consequence so were the activities.

The main ISRIC activities since the WWSM15 in Kyrgyzstan were related to:

- Comment on Draft Framework Agreement;
- Educational activities, PR and acquisition
- Presentations for and enhancing contacts with WUR and other groups;
 - Lectures on WOCAT for WUR students;
 - Exploring and suggesting options for students' theses and internships;
- Hired a student to update the Google Earth application (in progress);
- PR activities
- Exploring additional funding opportunities (esp. project proposals, e.g. GWC, RECARE).

Plans for 2013 – 2014

- Define role in new institutional structure
- Enhance and encourage use WOCAT in projects:
 - WOCAT in Green Water Credits (Kenya, Morocco, China, Algeria), 2007 - present;
 - WOCAT in EU-FP7 RECARE project ("Soil Threats in Europe"), starting second half of 2013. RECARE is expected to provide some direct contributions to WOCAT, both in methodology development and in financing WOCAT-related activities (as before in DESIRE and SOWAP) – together with "in-kind" contribution from ISRIC.
- Contribute to training and backstopping where required, esp. in mapping;
- Revive the WOCAT in Education "Task Force" (?);
- Contribute to further tools development (e.g. Analysis tool)
- Encourage research (by students) on Impact of SLM; Impact of WOCAT, Costs/Benefits etc.

Evaluation of the WOCAT events

Isabelle Providoli, Rima Mekdaschi Studer

A general evaluation / feedback form about the WOCAT Share Fair and the 16th WWSM was distributed to the participants of the 16th WWSM after the workshop. A total of 21 feedbacks were received.

Evaluation results of the WOCAT Share Fair and the 16th WOCAT Workshop and Steering Meeting, Pretoria, South Africa, 27. May to 1 June 2013

Rating from 1 (= poor) to 5 (= very good)

Questions	No of answers	Average rank
1. Content WOCAT Share Fair		
• Did the WOCAT Share Fair meet your expectations?	21	4.38
• Day 1: did the presentations of topic 1 “innovative SLM technologies and approaches” meet your expectations?	21	4.26
• Day 1: Did the poster market meet your expectations?	21	4.36
• Day 2: did the presentations of topic 2 “Applications of WOCAT-LADA tools” meet your expectations?	21	4.33
• Day 2: did the presentations of topic 3 “innovative tools” meet your expectations?	21	4.02
• Day 2: did the group work on topic 4 “success stories” meet your expectations?	17	4.38
• Will your institution benefit from the knowledge gained during the 2 WOCAT Share Fair days?	18	4.28
2. Field day		
• Did the field day i meet your expectations?	21	4.67
• Were interactions enhanced and was knowledge exchange fruitful?	21	4.69
3. Content 16th WWSM		
• Did the 16 th WWSM meet your expectations?	21	4.17
• Could concerns of countries / participants be addressed?	19	3.95
• Was the discussion on new WOCAT International set-up and MoUs instructive?	19	4.00
• Were the two WWSM well structured and content wise interesting?	20	4.00
• Did you like the national progress / poster market of the countries?	20	4.60
4. Usefulness of the WOCAT Share Fair and 16th WWSM for networking among participants?		
• Were the events useful for networking among participants?	20	4.35
• Was participation and interaction at the events encouraged?	20	4.55
• Was adequate time provided for questions and clarification?	21	4.21
• Was adequate time provided for group work?	20	3.98
5. Logistics		
• Was the conference venue Hotel Arcadia adequate?	21	4.33
• How do you rate the organisation of the WOCAT Share Fair and 16 th WWSM?	21	4.67
• Was the hotel accommodation in Hotel Arcadia?	15	4.23

The following recommendations and comments were made by the participants

- Conference was excellent in enhancing knowledge on SLM, very useful sharefair and workshop
- A "round table discussion" was suggested for the next WWSM to discuss arrangement/set up for WWSM to facilitate better interaction among participants.
- Agenda is a little tight. Participants could not fully absorb all the time. It would be better if there is half day leave to enhance the efficiency
- Many delegates did not appear to understand the conceptual subdivision of the conference / workshop components. This resulted in needless repetition
- Conference of 6 days seems bit long, would be better to incorporate field trip of 1/2 day in the middle of workshops
- Need for more countries or regional representatives of a set of countries
- Need for regional representation from Latin America (South, Central America and Caribbean), as it was missing
- The next WWSM meeting to be in Brazil or other Latin America country where Amazonian biodiversity is important
- If WOCAT also financially supports some countries who are newly starting and whose economy is not that good
- Accommodation hotel facilities were good, but communication facilities (e-mail) was poor.
- In accommodation double room policy to be discouraged
- Would be highly beneficial and useful if a day or half a day is set aside for sightseeing. We never know whenever we can come back another time

2.3 PARALLEL SESSIONS

2.3.1 Steering Meeting

(new: closed session for steering committee members)

Rima Mekdaschi Studer, Hanspeter Liniger, Isabelle Providoli

Attending: SDC, CDE, FAO, ISRIC, ICARDA, ICIMOD, ASOCON, South Africa MoA, UNCCD, WOCAT secretariat.

After a presentation by the WOCAT secretariat on strengths, impact, usage and strategy of WOCAT as well as on financial accounting and future outlook the new institutional set up and the drafted framework agreement were introduced and elaborated to the potential WOCAT International consortium members (draft document was sent to potential partners for review before the event).

The comments concerning the draft framework agreement that came from the steering meeting participants were rather critical and showed that this draft version was not addressing correctly or enough all the concerns of the potential partners such as:

- Vision of WOCAT International should be clear, which will motivate Partners to buy in. Framework agreement to show willingness and interest to cooperate and work as a consortium.
- WOCAT had the concept but is lacking the institutional framework,
- Be clear about the comparative advantages of the different partners (ownership, recognition).
- Programme should reflect the added value for the partners, also for the big agencies. Benefits for partners should be clear and exceed the overall “common goal”; otherwise why to join? ‘What is in it for me’?
- Programme will consist of different projects that have the same goal and work towards the same vision. Lead will be with the project holder.
- Partner projects may contribute to WOCAT but WOCAT may also get assignments/requests, in which partners should get a chance to participate.
- Agree first on programme priorities and workplan and then see what role and responsibilities each partner can take.
- Think regionally (think of the big agencies with bigger mandates, countries struggle to get funding therefore minimizing replication will increase efficiency and effectiveness of resources and impacts).
- Elaborate programme together and then discuss budget and core contributions to the secretariat. A WOCAT programme was drafted (see below).
- Should keep ‘core funding’/ contributions to the secretariat apart from project money. ‘Core funding’ as such is out.
- Funding has to be diversified. Co-funding strategy to prove that interest comes from a number of different (big) players.
- WOCAT International should be for the Partners and not held by the University of Bern (e.g. recruitment of the Director and Coordinator). Contribution of the different partners should be reflected in the framework agreement.
- Do we need such a strong framework? Some flexibility should be allowed or even ensured. FA to show that partners are working towards a common goal (e.g. upscale SLM best practices and bring wealth of information to land user, mainstream research in development, impact on the ground, cross-cutting/ inter-sectorial and multistakeholder) and show the comparative advantage of each partner. MoUs and LoAs to define in more details the partnership and how it is going to be implemented, the workplan and budget)
- The framework agreement as it is presented today looks like business as usual and does not ensure added value of the new set up.
- Possible way forward in FA: i) ask the Partners to send their suggestions and then accordingly structure the framework agreement; ii) WOCAT secretariat starts with a draft and then circulates it to the partners for their ‘buy in’.
- Develop a community of practice if a framework agreement seems premature.

After the discussion on the framework agreement the potential Steering Committee Partners presented their institutions by highlighting the following points

Key points:

- Vision and aim of organisation
- Overall Budget
- SLM mandate
- Possible role within steering committee
- Comments to framework agreement
- Possible financial contribution
- Possible concrete action for contract

All potential partners showed interest and basically approved (except ASOCON) in joining WOCAT International Consortium and were ready to sign the framework agreement after a thorough revision and taking into consideration the points and criticism that were mouthed during this session

For details on these presentations refer to the presentations accessible on the CD.

Consolidation of partner inputs and next steps:

- Simplify the framework agreement (FA). It should not be too specific.
- Link FA to a (4-5 yr) work programme, with a budget to justify the mentioned CHF 1M. It should contain the main “pillars” of WOCAT and partners can contribute through projects or directly to one or more pillars. At the same time attempts should be made to get funding for the programme in its entirety.
- Structure of the document should be improved and approved by partners
- Clarify roles of partners, members, director, coordination, secretariat, University of Bern etc.
- Reconsider and rephrase the mandate and ToRs of the director of WOCAT International particularly with respect to fund raising.
- Clarify financial aspects and role of partners in funding.
- FA Art. 27 Financial profit and financial loss as it is written (2 Financial loss will be covered by the Partners according to the size of their contributions and the size of the organization) is unacceptable. Reconsider and rephrase.
- Revisit and reassess the section on joint liability. Each Party shall have clear responsibilities and each is liable for their own projects.
- Reconsider the question of Yes/No to membership fee, pros and cons of membership fees.
- WOCAT secretariat will update and adapt the current draft according to the discussions. The draft will be circulated to Partners for review and legal check/ safeguarding by their respective institutional legal office
- Physical meetings and teleconferences are important
- Next face to face meeting of the WOCAT International Steering Committee during COP 11 in Namibia in September, 2013
- Get accreditation of WOCAT International by UNCCD secretariat for the reference SLM Best Practices platform.

Outline for the WOCAT Programme ("Draft WOCAT Programme OUTLINE_HP" file):

priority actions & work areas/ tasks

1. Database & Knowledge sharing

- Userfriendliness:
 - Database entry (*improve*)
 - Search function (*improve*)
 - Analysis tool (*build*)
 - Export function (*build*)
- Mobile apps
- Off-line option
- Further development of tools

2. Training, education & Capacity Building (incl. backstopping)

- Regional and National govt. institutions (WOCAT Method)
- NGO's, business, ...
- Curricula for universities
- Thesis subjects and internship options
- E-learning, videos and other educational material
- Link from local to landscape; local and national
- Inter-University Programmes

3. Research

- Impact assessment (of SLM / of WOCAT / of specific T & A) on-site and off-site → quantify benefits and ESS.
- Testing and further development of tools
- Combination of stakeholder and scientific knowledge/ research
- Costs / Benefits
- Link local to landscape/ watershed/ windshed

4. Implementation & Outreach

- Country assessment (cf LADA)
- Mapping
- Decision Support & Policy Guidance
- WOCAT Network
- PR: publications, videos & other multimedia, presentations, ...
- Guiding principles for different environments and users

2.3.2 Regional WOCAT Initiatives

(Session for all WWSM participants)

Janie Rioux (FAO), Nicole Harari (WOCAT Secretariat)

The session was divided into group work and plenary discussion. The first part focused on workplan by country or region (refer to national progress report chapter 2.2).

In the plenary the following items were discussed:

Ideas for using the **DRR/CCA and watershed tools** in your country and region?

Watershed module:

Nepal

University of Kathmandu has applied the watershed module with resources from ICIMOD.

Ethiopia

Three projects are relevant: World Bank assistance in SLM programme (now fading out, renewed for 5 years) where the watershed module could be used; USAID assistance land project (June 2013- 2018); WFP MERET project (continuous) → there is a gap at the federal level to coordinate with the WOCAT network, a new focal point has to be identified, but interest in continuing the work with WOCAT tools remains.

CCA module:

Nepal

The Ministry of Water could use the climate change module in the sustainable soil management programme that is coordinated with the Ministry of Agriculture.

Central Asia

GIZ has developed its own tool called 'climate proofing for development' which introduced CC issues within the programmes/projects at different levels.

Bhutan

Anything related to disaster is located at the disaster department, whereas the forestry department is responsible for biodiversity. They don't want to be too ambitious and promise to promote WOCAT to other departments or networks. First they will get more experience with using WOCAT tools before spreading to these other agencies (maybe in 2015).

What are the **improvements** needed? Costs-benefits / impacts on ecosystem services / others...

Central Asia

- Google Earth: wrong placement of Ts/As in the Google Earth application for Central Asia; would like to be informed when the Ts/As included in the database are uploaded on the Google Earth tool.
- Analysis: need many inputs from other data not only from farmers, QT cannot be used alone for research, need to complement it with other data, QT is more for documentation and not for analysis → The suggestion is to improve part 3 of the questionnaire.
- Improve the socio-economic analysis (Q2.5 and 2.6).
- Calculations are based on hectares, however, it is difficult to get this information, e.g rotational grazing in Uzbekistan happens around one well and not per hectare.
- Resource persons couldn't understand the meaning of the titles of the columns, the formulation used needs to be review.

Kenya

- Questionnaire too long for one Technology, it takes around four hours with the farmer.

Ethiopia

- How do we document indigenous Technologies? How do we name it? If we improve the Technology through analysis, what name do we give to the newly developed Technology? Can it be a combination of two names? What about the copyright issues, Technologies belong to the indigenous communities! ANSWER: Create a new name for the Technology which consists of a combination of the indigenous name and the new introduced elements.

India

- Address the biodiversity concerns in the watershed approach, e.g. fish ladder (steps in the check dams, fish can jump over), local biodiversity hotspots (where to put the structures, so they don't affect these hotspots) → define hotspots with local community (guidelines are under development- can be shared by WOTR)
- Awareness of local communities for DRR: 1) develop culture of coping with crisis, and 2) develop culture of disaster risk reduction at local level. The government has its own plan for all levels, but there is a gap between communities and the government plan. Disaster response team at the district level has to bridge the gap with villages and exchange plans. WOTR is developing a manual on DRR which can be shared with WOCAT once it is ready.

Nepal

- A possible Approach to be documented: conservation and promotion of local crop varieties, establishment of community seed bank
- Need to update land use/land cover base map, have only old maps. → Need capacity building if they want to apply the WOCAT mapping.

China

- CC resilience module: does it include mitigation? China has a project called climate change resilience/adaptation (in western China), however, no tool on CC mitigation exists. The GEF monitoring of the global environment benefits is not simple - how can we develop a simpler tool to monitor global environment benefits e.g. carbon, biodiversity conservation?

Bhutan

- The volume of the questionnaires is too lengthy → questionnaires should be reviewed.
- The documentation of traditional practices is very important and not only of new/engineered Technologies. Traditional practices can be better for CCA. Can the same questionnaire be used to document traditional practices or does it need revision? Bhutan will mainly document traditional practices.

What do countries expect from **WOCAT International**? Which benefits?

Senegal

As it is a governmental institution that is involved and is new in the network, they first need to discuss with the management. WOCAT International can be beneficial for more concrete actions at the community and producer levels – e.g. in how can they use the results and tools (technology transfer) and also for supporting to find donors as government funds are limited. Furthermore, WOCAT International can help to raise awareness on WOCAT tools at the national level and in regional projects. Now with the new set-up and more partners WOCAT International can help with concrete actions, SLM interventions, with producers in the field and feed the decision making.

Nepal (NGO)

In order to scale out the WOCAT tools they have to influence the government and participation of policy makers/government officials. It is more favorable if government parties participate, also for WOCAT International. However, the government has little money and therefore WOCAT could help them to link with donors. There is also only limited money available to allocate to the WOCAT documentation and application of the tools.

Central Asia (GIZ)

WOCAT International has to improve the interface of the database as a priority of the new set up.

Ethiopia (governmental ministry)

Need money for data collection and sharing with the global database. The government money is committed for training and watershed planning (1-2 days for WOCAT)

China (governmental agency)

Would need support in carrying out a QM training and large area monitoring. They need general support to find funding for WOCAT related activities and scaling up.

Bhutan (governmental agency)

It would be good if WOCAT International could provide funding support to countries. Also technical assistance is required. Furthermore, they would expect more rigorous actions from WOCAT International to strengthen the regional networks and support mechanisms. For the institutional linkage at the regional level WOCAT International can provide a facilitation role. Clarify who is the contact point for a national initiative, the regional node (e.g. ICIMOD) or WOCAT International Secretariat.

India (institution)

A large platform should be provided to influence both national and international policies.

Kenya (individual)

It is difficult to convince the MoA at the policy level but if it happens through an international network it can have more lobbying power.

Tunisia (individual)

The products will be used and promoted through the international network and national institutions. The assessments are useful to highlight densification problems and possible solutions.

2.4 CLOSING OF 16TH WWSM

Hanspeter Liniger (WOCAT Management)

For the closing Hanspeter Liniger summarized the outcomes of the steering committee meeting and Nicole Harari summarized the concerns expressed during the session of the regional initiatives (refer to sections 3.1 and 3.2). After some feedback from the participants organisational and administrative issues were discussed.

Organizational and administrative issues

The participants agreed that also under the new WOCAT set up the share fair and WOCAT workshop should be held biannually. However the WOCAT workshops in future should put more emphasis on technical issues and task forces to treat such issues should be revived. Repetitions in the programme and in subject matter should be avoided. Some repetitions were seen as necessary to integrate newcomers and do justice to the broad spectrum of WOCAT share fair and workshop participants. The idea of regional workshops or meetings to bridge this gap was recommended. This way, regional nodes will be also strengthened and act as a link between the national initiatives and WOCAT International (e.g WOCAT secretariat). Furthermore the WOCAT website should play a more important role in acquainting newcomers as well as network members on existing methods and tools as well as new developments. The duration of the WOCAT event was seen as too long in particular considering the repetitions between share fair and WOCAT workshop. The share fair could concentrate on subject matters of interest to a broader audience and the workshop on technical issues of interest to LADA-WOCAT tool users.

However, the participants agreed that a steering committee meeting where all consortium members of WOCAT International come together should be held annually.

The Global Management consisting of

- CDE: Hanspeter Liniger (Global coordinator; Secretariat)
- FAO: Sally Bunning
- ISRIC: Godert Van Lynden
- Secretariat: CDE is hosting the WOCAT Secretariat. It was approved until the 1st steering committee meeting of WOCAT International that will be held in 2014 probably in Bern.

Next WWSM

The next WOCAT share fair and workshop is planned for May/ June 2015. Until then most MoUs with potential host countries or organisations (regional and national partners) should be signed or at least under discussion.

The following suggestions for hosting the event were made:

- ISRIC in Wageningen, the Netherlands.
- One of the FAO-WOCAT GEF project countries if possible in South America, e.g. Argentina
- Bhutan
- etc

Hanspeter Liniger thanked the host country South Africa, sponsors, partner institutions and local organizers, in particular Lehman Lindeque for all the resources and effort they have invested to make the events a success.

ANNEX 1A: FIELD TRIP REPORT

Report by Lehman Lindeque

Background

The WOCAT field day, as part of the WWSM 16, took place on Wednesday 29 May 2013 in the Pretoria and Midrand local municipalities, Gauteng province.

The purpose of the field day was twofold: First of all to introduce the WOCAT Mapping questionnaire (WOCAT QM) and the concept of developing a base map for a land degradation and conservation assessment at local level (farm level). Secondly, to visit a permaculture training center and demonstration farm to introduce different

concepts of permaculture to workshop participants, but also to link these conservation measures to WOCAT in the sense of using the WOCAT Methodology to describe these measures.

WOCAT Mapping exercise

The exercise took place on the farm Rietfontein to the South East of Pretoria. After a briefing section on the purpose of the exercise, participants were given the opportunity to develop a base map and mapping units for a WOCAT QM assessment for the farm Rietfontein. The results were discussed in a plenary session and some good discussions follow on the scale of assessment and the detail of assessment data.

The participants were then divided into small groups to do a physical assessment of the farm Rietfontein using the WOCAT QM Methodology and QM Matrix. The three groups did an partial assessment for one of the following land uses: cultivated land, natural grazing, open water and wetland areas. As mentioned before, the purpose of this exercise was to introduce WOCAT QM to newcomers and secondly, to allow WOCATEERS from different countries to share their experiences within the small groups. An example of a related technologies and approaches questionnaire (QT and QA) of conservation measures found on the farm Rietfontein, was also discussed with the group to illustrate the link between WOCAT QM, QT and QA. After a feedback plenary session, the bus depart to our next stop, Ukuvuna Permaculture Farm

Ukuvuna Permaculture Farm

After lunch at Ukuvuna Permaculture farm, Mr John Nzira introduces his permaculture training concept, explain the purpose of the demonstration farm and introduce the co-facilitators for group work. A completed WOCAT Approaches questionnaire on the Ukuvuna Demonstration Centre was also handed to participants to understand how a specific conservation approach they just been introduced to, are documented using the WOCAT tools.





Group pictures during the field day (Photos: H. Liniger)

ANNEX 2A: NATIONAL PROGRESS POSTERS AND PRESENTATIONS

June 2011 – June 2013

The following countries presented a national progress poster at the 16th WWSM. The posters can be found on the CD.

Asia	Africa	New initiatives	Not attending
Bhutan CALCIM China ICIMOD India Nepal Philippines	Ethiopia ICARDA Kenya Senegal Tunisia Yemen	Afromaison Greenwater Credits Chile (FAO RLC)	Afghanistan Niger China

GLOBAL PROGRESS POSTERS

June 2011 – June 2013

The Global Progress Poster can be found on the CD.

ANNEX 2B: GLOBAL PROGRESS TABLE

Logframe comparing planned and achieved activities and outlook (July 2011 – June 2013 separated into 2 reporting periods)

Progress Report: 01.07.2011 – 30.12. 2011

Objectives / Expected results	Activities	Major global activities planned → activities achieved
1. Knowledge about SWC and SLM Support (backstopping) for the production of outputs at national and regional level. Analysis and synthesis regarding emerging global issues.	<ul style="list-style-type: none"> • support the production of national overviews • produce dissemination materials: Use of WOCAT (posters, pamphlets, videos) • develop a world map on the major SLM measures • enlarge the number of documented and evaluated SLM technologies and approaches in the global database • assess / analyse SLM knowledge gained through WOCAT and show their contribution to global issues • promote and support the establishment and operation of national peer review panels to ensure and enhance the quality of the information 	<ul style="list-style-type: none"> • Finalizing French and Spanish on-line version of the WOCAT publication 'where the land is greener' • Compilation proceedings of Share Fair and WWSM 2011 → done • Up-date and enhance quality of data and further populate database with incoming technologies and approaches from partners → on-going (e.g. Tajikistan and DESIRE case studies updated for publication) • Further support the production of national overview books and outputs → PPCR Tajikistan and DESIRE overview books finalized • New promotion material for WOCAT → Flyers and posters for UNCCD COP10, October 2011, Changwon, South Korea • Publications (on mapping and/or best practices) → not achieved • More appealing PR products (on website) → Short version of prototype video was produced (where the land is greener and the water bluer) for uploading on WOCAT website and promotion purposes
2. Tool (and method) development Additional and enhanced tools for exchange of knowledge and decision support developed	<ul style="list-style-type: none"> • elaborate questionnaire modules on issues like watershed management, poverty alleviation, carbon sequestration and other upcoming important issues • further develop and adapt the SLM categorization system to include newly integrated issues of the revised questionnaires • make available prototype of overview books (guidelines, templates) • develop tools to assess SLM technologies / approaches / and their spread with regard to global conventions and MDGs • develop enhanced data analysis and evaluation tool -> decision support tool (validation/evaluation of SLM, planning of SLM) 	<ul style="list-style-type: none"> • On-line data bases debugged → almost done • All data from access database transferred (including French and Spanish data sets) → done • User - friendly data entry → ongoing • Develop climate change module → Updated version of climate change adaptation module (Version2) • Improve user-friendliness of the new WOCAT website and translate into French and Spanish → ongoing

Objectives / Expected results	Activities	Major global activities planned → activities achieved
	<ul style="list-style-type: none"> • adapt database to new questionnaire developments (in new on-line software) • advance mapping system (new software/mapping tool in cooperation with FAO/UNEP to incorporate GIS/RS as well as expert knowledge on spatial distribution of degradation and conservation) • develop new database system (new software), including feedback mechanism for quality assurance • build an interactive data entry, viewing and updating system • develop holistic methodology including (a) SLM identification through stakeholder workshops, (b) SLM documentation and evaluation with questionnaires and (c) comparative analysis of SLM options with the help of a decision support tool • develop method and identify indicators for local level assessment (jointly with University of East Anglia, FAO/ UNEP/ UNU/ GEF/UNDP) • develop guidelines for documentation, evaluation and use of SLM knowledge (also for global and national review panels) • set up training modules on SLM knowledge management using WOCAT tools 	<ul style="list-style-type: none"> • Development of a WOCAT light prototype questionnaire and 2-page summary template for UNCCD SLM best practices reporting. For better visualization an IUCN documented technology using the PRAIS format was transferred and presented in the standardized WOCAT 2-page summary format. • Draft proposal for a video project 'Audio-visual messages from land user to land user - Enhance existing WOCAT knowledge with video and new media for knowledge sharing in sustainable land management' developed and sent to potential partners
3. Information sharing and networking WOCAT Network enhanced and consolidated	<ul style="list-style-type: none"> • strengthen partner in the use of WOCAT • add new partners and consortium members in SDC priority regions where WOCAT is not yet well established. • sponsor participation of WOCAT partners at WWSMs to enhance exchange, contacts and cooperation between different countries • participate in International Conferences and meetings to promote WOCAT (eg at events of UNCCD, IUSS and ISCO; LADA) • integrate WOCAT in environmental and development processes at the global (UNCCD, UNCBD, UNFCCC, LADA) and at the national / regional level (government, NGO and bilateral projects). Give special attention to SDC priority countries • continue and enhance the WOCAT e-mail list and newsletter • establish and maintain links to other networks • regional / international exchange visits • improve platforms for communication to facilitate contacts and 	<ul style="list-style-type: none"> • WOCAT and UNCCD → Bilateral meetings 13.7 and 25-26.8.2011; COP10, 10-21.10.2011, Changwon, South Korea; follow up on partnership by e-mail and Skype calls; Changwon initiative • Promote publicity and visibility: attendance of and side event at UNCCD-COP10 → conducted a WOCAT side event, presented at 5 sessions of Rio pavilion and participated in diverse other sessions and side events • Follow up on GEF5 WOCAT-LADA proposal → ongoing • Follow up on GGWI → Regional workshop by FAO/WB, 13-15.12.2011, Ouagadougou, Burkina Faso • Promote link to global, regional and national programmes/ institutions → ongoing: WB, IFAD, FAO, GM, TerrAfrica, CACILM, UCA • Pursue already running projects → ongoing: Mongolia, PPCR Tajikistan

Objectives / Expected results	Activities	Major global activities planned → activities achieved
	<p>knowledge sharing between WOCAT partners</p> <ul style="list-style-type: none"> • add new partners and consortium members in regions where WOCAT is not yet well established. 	<ul style="list-style-type: none"> • Attend meetings and conferences to enhance WOCATs publicity and visibility → FAO sub regional workshop on: “Land Tenure, Planning and Management: Their Impacts on Sustainable Agriculture and Food Security in SNO Countries (Oriental Near East), 18-20.12.2011, Amman, Jordan; 4th Caux Forum for human security – Restoring earth’s degraded land, 15.7.2011, Caux, Switzerland; International Conference on Drylands, 6-8.7.2011 Alghero, Italy; General DESIRE Meeting, 3-7 October, Almeria, Spain • Upcoming initiatives → watershed management and DRR, SDC Tajikistan; SNOCAT (regional WOCAT for the Oriental Near East); HEKS (Hilfswerk der Evangelischen Kirchen der Schweiz); ARC (Alliance of Religions and Conservation)
<p>4. Research, training and education</p> <p>Partners trained to run WOCAT programme in their countries and regions. Use of research to support WOCAT’s mission and develop tools and outputs</p>	<ul style="list-style-type: none"> • conduct additional international ‘Training for National Trainers / Facilitators’ workshops • provide support and expertise for additional national and regional initiation and training workshops, upon request from national / regional institutions • facilitate / assist in links to research (e.g. DESIRE, COST, NCCR) • publish in appropriate journals <hr/> <ul style="list-style-type: none"> • promote and provide supervision for MSc, PhD thesis addressing knowledge gaps • develop training modules, manuals and teaching material for universities and extension services 	<ul style="list-style-type: none"> • Training workshops and training of trainers (upon demand subject to funding) → WOCAT Training workshop (including livelihood component), 19-22.10.2011, Ramallah, Palestine • Education → Supervision of BSc and MSc-studies using and testing WOCAT tools • Research • → GWC project with ISRIC • → Linking geospatial information and capacity development to combat desertification in Mongolia
<p>5. Basic enabling activities at the global level</p> <p>Keep the WOCAT programme and network running at a basic level</p>	<ul style="list-style-type: none"> • maintain and update global DB • organize one international WOCAT Workshop and Steering Meeting (WWMS) per year followed by proceedings • produce newsletter (half-yearly, with active participation of national/regional initiatives) • enhance e-mail communication and mailing list (WOCAT-L) • keep website up-to-date • build up a pool of trainers and trained specialists • coordinate programme, and maintain good relations to donors • update brochures, flyers, etc. (promotion of WOCAT) <hr/> <ul style="list-style-type: none"> • update WOCAT CD-ROM (every 3-4 years) 	<ul style="list-style-type: none"> • Consultancy for concept note, funding strategy/ business plan, funding proposals, and planning of the way forward → concept note and business plan developed, planning of the way forward ongoing • External evaluation: consider report and recommendation for planning next phase → done, recommendation considered for credit proposal 2012-2016 • Explore the most promising options for institutional set-up → ongoing • Send concept note to partners/potential donors for their vision on how to strengthen partnerships/ possible collaboration in the future → done. • In preparation for writing a business plan/ credit proposal conduct

Objectives / Expected results	Activities	Major global activities planned → activities achieved
	<ul style="list-style-type: none"> invest in finding new donors 	<p>survey on the need of global WOCAT coordination and secretariat → done</p> <ul style="list-style-type: none"> Strengthen efforts to streamline WOCAT in global, regional and national programs: UNCCD, UNEP/UNDP, GEF, WB, ADB, ACSAD and country programs → ongoing Develop new collaboration and funding proposals and negotiations with donors (new funding phase) → done for SDC, other potential donors ongoing New funding proposal developed and submitted to SDC (December 2011) Compilation of WOCAT Share Fair and WWSM 2011 proceedings → done Maintenance and updating of databases (including address database) → ongoing. Up-dating WOCAT website → ongoing, improving user friendliness of website Backstopping and support to network → ongoing Update brochures, flyers, etc. → ongoing

→ Grey shaded areas refer to activities that will be or were done with NRE-CDE contributions, the non-shaded areas depicts the activities that are / could be done using other sources of financial contribution.

Progress Report: 1.1.2012 – 31.5.2013

Outcomes / outputs	Achieved activities 1.1.2012 - 30.6.2012	Achieved activities 1.7.2012 - 31.12.2012	Achieved activities 1.1.13 - 31.5.2013
Outcome 1: WOCAT up-scaled and mainstreamed as the world leading platform for KM & DS for SLM at different scales.			
Output 1.1 WOCAT International is established (formalised set-up) and running	<p>Legal analysis of future potential set-up performed by legal expert (Lisa Bürgi).</p> <p>Consultant Pierre Walther engaged to follow the reorganisation process of WOCAT and first meetings held.</p> <p>Various face-to-face meetings with potential partners held.</p> <p>FAO (FAO sections / TECA) and IFAD meeting in Rome, March 2011 jointly with ISRIC.</p> <p>Biovision, HEKS, WB Washington (Peter Messerli).</p> <p>Various e-mail correspondence and skype calls with IAEA, WB (GGWI, SAWAP, TerrAfrica), UNEP (TNA website and Climate TechWiki), Bilateral donors (South Korea (Sojin Park), CIDA, NORAD), ICIMOD, WRI, OSLO, ELD, UNCCD.</p> <p>Various WOCAT management skype calls and e-mail correspondence.</p> <p>WOCAT management brainstorming/retreat workshop held in June and decision taken to set-up WOCAT as a simple partnership.</p>	<p>Framework agreement and bylaws drafted and legally safeguarded</p> <p>Negotiation process with a range of potential steering committee partners on-going (UNCCD, FAO regional programmes, IFAD, ICARDA, ICIMOD, IAEA, etc.)</p> <p>Framework agreement was sent to WOCAT Management (CDE, FAO, ISRIC) and SDC in October for comments and feedback (workshop with potential partners did not materialize and consensus on framework agreement not find yet)</p> <p>User needs assessment survey drafted by FAO in consultation with WOCAT</p> <p>Review workshop on WOCAT products and services postponed</p> <p>WOCAT strategy extended until end of 2013</p> <p>Discussion with Bloomberg foundation on supporting WOCAT</p> <p>Meetings with SDC on progress</p> <p>Consultancy of Pierre Walther continued and finalised to follow the reorganisation process of WOCAT</p>	<p>Draft framework agreement finalized and sent to potential steering committee partners for comments, to complete and possibly sign during WWSM16.</p> <p>MoUs draft to be discussed at WWSM16</p> <p>WOCAT International launched at WWSM 16</p> <p>Formal request to join steering committee: Letters and documents sent to potential steering committee members for feedback and input at WWSM16.</p> <p>User need survey completed and data analyzed (FAO in cooperation with WOCAT)</p> <p>Schema/ diagram showing WOCAT-LADA tools and tool kit as basis for discussion during WWSM 16 prepared.</p> <p>Old WOCAT strategy (2008-2012) prolonged until end of 2013.</p> <p>A consultant is engaged to scan and address foundations for further funding</p>
Output 1.2 WOCAT methods and tools ready to be mainstreamed into major international / regional / national programmes & institutions	<p>The following programmes are using WOCAT tools:</p> <p>SLMIO Afghanistan.</p> <p>China GEF project (Zhang Kebin) -> finalising new publication.</p> <p>Central Asia (Kyrgyzstan, Uzbekistan, Kazakhstan, Tajikistan, Turkmenistan and CACILM).</p> <p>Ministry of Agriculture in Bhutan -> finalized QT/QA publication.</p>	<p>Acceptance of the LADA-WOCAT GEF proposal (PIF: Project Identification Form)</p> <p>Continued discussion with UNCCD and meeting in Bonn (26. – 27.9.) about SLM best practices</p> <p>Submission of interest to the UNCCD call "Identification of primary databases for UNCCD best practices"</p> <p>The following programmes continued using</p>	<p>Consultancy signed between FAO and WOCAT on the preparation of the global project "decision support for Mainstreaming and Scaling up of Sustainable Land Management".</p> <p>Consultancy signed between FAO and WOCAT on the Guidelines on diagnostic and decision support for Mainstreaming and Scaling up of Sustainable Land Management.</p> <p>WOCAT responded to UNCCD "Scientific Knowledge Brokering Platform (SKBP)" call and presented at the SKBP side event during</p>

Outcomes / outputs	Achieved activities 1.1.2012 - 30.6.2012	Achieved activities 1.7.2012 - 31.12.2012	Achieved activities 1.1.13 - 31.5.2013
	<p>New projects starting using WOCAT methods & tools:</p> <p>CASCADE -> (research project in South European countries, WOCAT has fix component, started in Jan 2012)</p> <p>COST action ES1104: Desertification Knowledge hub (EU countries), started in April 2012.</p> <p>SNIS project CC adaptation and migration (Bolivia, Nepal) -> approved.</p> <p>DRR/ watershed management (SDC project) in Tajikistan (CDE / WOCAT mandate). Field exchange input in May 2012.</p>	<p>WOCAT tools:</p> <p>SLMIO Afghanistan</p> <p>China GEF project (Zhang Kebin)</p> <p>Central Asia (Kyrgyzstan, Uzbekistan, Kazakhstan, Tajikistan, Turkmenistan and CACILM)</p> <p>Ministry of Agriculture in Bhutan</p> <p>Research projects using WOCAT methods & tools:</p> <p>DESIRE: PhD of G. Schwilch on "A process for effective desertification mitigation" at the University of Wageningen using WOCAT completed (Sep)</p> <p>CASCADE -> (research project in South European countries)</p> <p>COST action ES1104: Desertification Knowledge hub (EU countries)</p> <p>SNIS project CC adaptation and migration (Bolivia, Nepal)</p> <p>NCCR North-South: Study in Valais, Switzerland</p> <p>SCOPES project: 2 master studies</p> <p>Follow up on the use of WOCAT methods and tools with:</p> <p>UNCCD</p> <p>FAO regional programmes (MENA, LAC)</p> <p>ICARDA</p> <p>IAEA</p> <p>SDC project (DRR and watershed management in Tajikistan)</p> <p>HEKS, etc</p> <p>Further input to existing projects / mandates was provided (e.g. Mongolia, China, etc)</p>	<p>CRIC11.</p> <p>Follow up with UNCCD on 'best practice' call and attending side event and plenum on 'review of best practices' during CRIC11.</p> <p>Networking and liaising with old and potential WOCAT partners during CST 3 Scientific conference and CRIC11 (e.g. GGWI, USAID/ Jornada, LADA-WOCAT countries, etc).</p> <p>Attending BMBF-Funding Measure "Sustainable Land Management" Status Conference, 17-19 April 2013 in Berlin. Presented WOCAT tools and products.</p> <p>SDC contract on video</p> <p>FAO-LAC backstopping and feedback on WOCAT tool (QT, QA, QCC) adaptation to their needs. WOCAT Workshop held 6-7 May in Santiago.</p> <p>Meeting with WOTR, India in Bern (Jan)</p> <p>Meeting with ICIMOD, Nepal in Bern (Jan)</p>
Output 1.3	Jan / May 2012: Strengthen collaboration	Follow up:	Ongoing

Outcomes / outputs	Achieved activities 1.1.2012 - 30.6.2012	Achieved activities 1.7.2012 - 31.12.2012	Achieved activities 1.1.13 - 31.5.2013
Formalize and support initiation of national and regional SLM KM hubs	<p>with MONCAT partners, meetings in Bern.</p> <p>March 2012 ASOCON workshop (Lead: Philippines) -> new Asia hub established.</p> <p>May 2012: CACILM regional meeting, CACILM continues using WOCAT tools.</p> <p>June 2012: SNOCAT launch, Beirut; Lebanon (FAO lead)</p> <p>Senegal -> at nat. level officially signed to use WOCAT/LADA tools.</p>	<p>FAO-SNOCAT: a first training workshop on using WOCAT – LADA tools was held in Nov 2012 in Cairo.</p>	
Output 1.4 Enhance network and recognition of WOCAT through conferences, etc.	<p>World Water Forum in Marseille attended and presentation made at the Swiss Water Pavilion.</p> <p>FAO Land and Water days attended (7.-11.5.), training workshop delivered and booth maintained.</p> <p>Lunch talk on WOCAT at "Water Diplomacy Workshop" at Swissnex Boston (June 2012)</p> <p>COST action ES1104: Desertification Knowledge hub (EU countries),</p>	<p>Presentation at 'Restoring Land, Restoring Lives' at the 5th Caux Forum for Human Security (9.7.)</p> <p>ICRD conference in Bern (20-22.8.) attended</p> <p>CAMP Forum CA, 4. -6.10., attended</p> <p>Presentation at WB CIF Partnership Forum, Istanbul, 6-8. 11.</p> <p>Presentation at Global Soil Week Potsdam, 19 -22.11.</p> <p>International Graduate School (IGS) North-South: Natural resources, sustainable land management and ecosystem services, 6 – 8.11. Bern,</p>	<p>WOCAT 'course' held for CASCADE, SNIS and COST PhD students (Nov. 2012; 22 – 26 April, 2013)</p> <p>CASCADE workshop and field trip to Spain</p> <p>Participation at HMNDP(UNCCD/WHO/FAO High-level Meeting on National Drought Policies): WOCAT booth, video and side event: towards more drought resilience - reducing the human made drought – tapping existing knowledge</p> <p>Participation at UNCCD CST S-3 and 2nd scientific conference and CRIC 11 (9-18.4.2013): booth, poster, plenary and side events:</p> <p>Adapting to climate change and disaster risk reduction through sustainable land management: experiences in Tajikistan, East Africa, US, Argentina and Mongolia</p> <p>Economic benefits and costs of technologies for sustainable land management – Analysis of WOCAT data from three continents</p> <p>Assessment and mapping of LD and SLM as a direct support to planning and up-scaling of SLM interventions to combat desertification</p> <p>Tools for better SLM knowledge management and informed decision making to address land degradation at different scales – the WOCAT /</p>

Outcomes / outputs	Achieved activities 1.1.2012 - 30.6.2012	Achieved activities 1.7.2012 - 31.12.2012	Achieved activities 1.1.13 - 31.5.2013
			<p>LADA methodology</p> <p>ensuring access and use of information on BP</p> <p>SLM Best Practices reporting and decision support for UNCCD implementation – Experiences from countries using WOCAT-LADA-DESIRE tools for assessing LD and effectiveness of SLM</p> <p>Presentation at EGU General Assembly 2013: „Soil Organic Carbon for Global Benefits – assessing potential SOC increase under SLM technologies worldwide and evaluating tradeoffs and gains of upscaling SLM technologies (Vienna, Austria, 10 April 2013)</p> <p>China: PRC-GEF Partnership International Conference on SLM Policies and Practices to be held on May 7-8, 2013 in Beijing.</p> <p>WOCAT Share Fair and WWSM 16</p> <p>DesertLand Conference 17 & 18 June 2013, Ghent, Belgium: Poster and key note: Desertification Mitigation and Water Harvesting based on Sustainable Land Management</p>
Output 1.5 Products to raise awareness and demonstrate needs for DS tools: innovative and attractive presentations, interactive tools and new media, brochures, posters.	<p>DESIRE book published: Desire for greener land (EU-funded).</p> <p>“Bhutan catalogue of soil and water conservation approaches and technologies” published (MoA Bhutan).</p> <p>RWH mandate (IFAD, SDC), producing knowledge brokering products and learning notes finalised.</p>	<p>Google Earth: automatic display finalized</p> <p>Video clips: case studies (prototype) in Tajikistan continued</p> <p>Small video project with IFAD approved</p> <p>Workshop report of SLM Decision Support Workshop: Initiative on Community-Based DRR through Integrated Watershed Management (IWSM), 2-4 May 2012, Muminabad, Tajikistan,</p> <p>Advents calendar on sustainable development,</p>	<p>Video on building resilience to CC and Disasters and for desertification decade</p> <p>Poster on video tool</p> <p>Water Harvesting – Guidelines to Good Practice published</p> <p>China 2nd Overview of Best Practices Publication published and launched ant PRC_GEF partnership conference (May)</p>
Output 1.6 DS support tool at local and regional / national level further developed and tailored to different target groups.	DESIRE tools adapted for watershed in Tajikistan -> 1st pilot, (EU-funded).	Proposal to HEKS still in pipeline due to staff change at HEKS	Research projects ongoing
Outcome 2: SLM knowledge base globally enhanced and extended to new areas including food security, watershed / water resource management, climate change adaptation,			

Outcomes / outputs	Achieved activities 1.1.2012 - 30.6.2012	Achieved activities 1.7.2012 - 31.12.2012	Achieved activities 1.1.13 - 31.5.2013
biodiversity conservation and new emerging issues.			
Output 2.1 A comprehensive and growing database covering various Agro-ecological zones (AEZ) and socio-economic conditions world-wide established	<p>The WOCAT database has been further populated or updated with 200 QTs from 32 countries and 61 QAs from 9 countries.</p> <p>DESIRE case studies, 20 QT and 8 QA reviewed and updated.</p> <p>In Central Asia a substantial amount has been added to the database. The following QTs: KAZ 5 (3 in English (en) and 2 in Russian (ru); KYR 6 (4 en, 2 ru); TAJ 92 (45 en, 47 ru); TUM 7 (4 en, 3 ru); UZB 8 (4 en, 4 ru).</p> <p>In Central Asia the following QAs have been added: KAZ 4 (2 en, 2 ru); KYR 6 (3 en, 3 ru); TAJ 43 (19 en, 24 en); UZB 4 (2 en, 2 ru).</p>	<p>5 QTs (4 from Tajikistan and 1 from Syria) and 9 QTs were translated into Russian</p> <p>1 QA has been translated into Russian. 1 QA was sent by a SNOCAT member country for quality assurance</p>	<p>Quality check of case studies ongoing</p> <p>Entering of new case studies ongoing but slow</p>
Output 2.2 National and regional SLM inventories, guidelines and maps published	17 DESIRE maps finalised.	no new maps uploaded to the online WOCAT mapping database	
Output 2.3 Synthesized knowledge with respect to global issues available	<p>DESIRE book (hardcopy version published in May 2012).</p> <p>RWH-IFAD knowledge brokering products and learning notes are currently in review.</p>	<p>DESIRE book launched at ICRD conference in August and broadly distributed at every occasion</p> <p>Contracts with IFAD and SDC to revise and publish the RWH report</p>	WH publication not yet officially launched
Outcome 3: Capacities enhanced for SLM up-scaling (understand principles of SLM, use of WOCAT tools, transform knowledge for different users, filling knowledge gaps through research, tools & methods continuously build and developed according to needs and demand)			
Output 3.1 Standard and flexible methods & tools for SLM KM are available and updated regularly	<p>CC module (V 2), Tajikistan WB-PPCR finalized in April 2012,</p> <p>CC module (V 1) translated into Spanish by FAO.</p> <p>Watershed module tested in Nepal (Kathmandu Univ., ICIMOD)</p>	Detailed feedback to Nepal on testing of watershed module still pending	Ongoing but slow
Output 3.2 Adapted WOCAT templates for different organisations produced (e.g.	Idea exchange with FAO (WOCAT light/shell), IFAD, and UNCCD.	Follow up with FAO and UNCCD on-going	<p>Follow up ongoing</p> <p>User need survey sent to a big audience and first data analysis was done</p>

Outcomes / outputs	Achieved activities 1.1.2012 - 30.6.2012	Achieved activities 1.7.2012 - 31.12.2012	Achieved activities 1.1.13 - 31.5.2013
UNCCD national reporting)			
Output 3.3 Modules further and newly developed upon demand (e.g. watershed management, CC adaptation/mitigation, economics...)	CC module version 2 finalised (please refer to output 3.1)	Interest of FAO LAC to work with the CC questionnaire and to adapt it to their conditions	ELD call submitted Adaptation of CC module by FAO LAC ongoing. Workshop held in Santiago 6-7 May
Output 3.4 User-friendly website and databases are operational and accessible to all partners (technical coordination and maintenance)	132 new users registered through the WOCAT website as "active members" and / or for "information only". WOCAT website has been revised. A half day retreat on WOCAT database and priority setting took place.	Major priority actions to improve the WOCAT database on-going 106 new users registered through the WOCAT website as "active members" and / or for "information only"	Ongoing
Output 3.5 Basic backstopping and capacity for using WOCAT tools by major international / regional / national initiatives build	May: GGWI LUS and mapping workshop in Niamey, Niger (by FAO and by Abdoulaye Soumaila). June: QM training in Afghanistan (by Lehman Lindeque, South Africa), (Helvetas). UNRWA Palestine, 1 day follow-up workshop on QT, QA.	National Desertification Monitoring System training workshop in Khovd area of Mongolia (8-15 September) QM training in Cote d'Ivoire (October, Centre Suisse de Recherche Scientifique) FAO-RNE SNOCAT QT, QA and QM training (Cairo, Nov 2012) (refer to output 1.3) QT and QA training by SLMIO in Bamyar, Afghanistan (27.11. - 4.12.) Backstopping to the application of QM for UNRWA Palestine	
Output 3.6 Training materials developed: manuals, interactive training tools (presentations, video as well as advanced training and backstopping)	Video proposal for IFAD prepared based on face to face discussion in May 2012. Pilot video produced in Tajikistan within a CDE project.	Proposal on training videos submitted to IFAD → refer to output 1.5 Presentations on how to use WOCAT tools prepared and adapted to specific training workshop objectives National Desertification Monitoring System (methodology) of Mongolia further developed	No progress

Legend for outputs:

	Outputs achieved with SDC funding
	Outputs partly achieved with SDC funding
	Outputs not funded by SDC

ANNEX 3: WORK PLANS JULY 2013 – JUNE 2015

Please note that not all active WOCAT countries were able to provide a workplan. The following workplans have been submitted.

Asia

Afghanistan
Bhutan
CALCIM
China
ICARDA
ICIMOD
Philippines
Yemen

Africa

Ethiopia
Kenya
South Africa

South America

Chile (FAO RLC)

Afghanistan WORKPLAN for: July 2013 – June 2015										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
NRM/SLM professionals trained on WOCAT methods and tools	At 2 practical training for about 20 professional organised	2	2	HELVETAS Swiss Intercooperation	As required for WOCAT training on Ts and As	10,000 USD		AFCAT national staff SLMP Expat		2 nd half of 2013 and 2014
Case examples on SLM documented and disseminated	At least 8 AFCAT fact sheets from Central Highlands (Technologies and Approaches) prepared by end of 2014 An AFCAT Central Highlands database on documented case examples At least 2 promotional workshop organized at sub-national and national level for managers and policy makers	2	12	HELVETAS Swiss Intercooperation		24000		AFCAT national staff SLMP Expat		June 2013-December 2014

Prepared by: Mohammad Khalid Azami

Total: US \$ 34000

US \$ Nil (The cost do not include the cost of AFCAT staff)

Bhutan WORKPLAN for: July 2013 – June 2015										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
Professionals trained on WOCAT tools & methods	2 nd training on WOCAT documentation	2	2	HIMCAT, WOCAT, NSSC	WOCAT training materials, office supplies, computer		5,000	BHUCAT Coordinator	NSSC	Aug 2013-Jan 2014
	Set up a core group of experts from relevant agencies (Local Champions)	2	1	NSSC	Nil		1,000	BHUCAT Coordinator	NSSC, Research	Aug-Sept 2013
Existing BHUCAT reviewed or updated	Bring together core group of experts and revisit existing BHUCAT	6	6	NSSC, Research	BHUCAT, RDCs		1,000	BHUCAT Coordinator	NSSC, Research	Sept 2013- February 2014
	Document new technologies & approaches	6	12	NSSC, Research	WOCAT questionnaires, digital camera		5,000	BHUCAT Coordinator	NSSC, Research	Oct 2013 – Sept 2014
Set up BHUCAT website, database or network	Hire IT expert to design and set up BHUCAT website or network at NSSC	1	8	NSSC	Server, internet, computers		2,000	BHUCAT Coordinator	NSSC	July 2013- 2014
Bhutan SLM best practices uploaded on HIMCAT/WOCAT online database	Upload Bhutan best practices to HIMCAT/WOCAT online database and validate or edit to suit international audience	2	5	HIMCAT, WOCAT, NSSC	Access to HIMCAT database		0	BHUCAT Coordinator	NSSC	Oct 2013 – March 2014
Publication of BHUCAT Factsheets	Print BHUCAT Fact sheets for wider dissemination of information and experiences	1	18	NSSC	BHUCAT Fact sheets		2,500	BHUCAT Coordinator	NSSC	Jan2014-June2015
Participation in WWSM	Compile progress reports, work plans and special presentations if needed	1	1	NSSC, WOCAT	Progress report & W/plan templates		3,500	BHUCAT Coordinator	NSSC	To be announced by WOCAT

Prepared by: The National Soil Services Centre (NSSC), DoA, MoAF

Total: US \$ 20,000

CALCIM WORKPLAN for: July 2013 – June 2015										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
Calendar for 2014	To develop and publish a Calendar for 2014 under the title 'Activities of the Regional Programme through a prism of WOCAT' in which all 15 GIZ SLM best practices will be presented.			GIZ Regional programme						By the end 2013

Prepared by: Natalia Mitiakova

Total: US \$

China WORKPLAN for: July 2013 – June 2015										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
Training on QM	learning how to use QM and influence the decision maker	7	7	CPMO and PPMO	Vehicle, and office equipment			CPMO	CPMO and 6 PPMO	Before January 2015

Prepared by: Zengming Song

Total: US \$

ICARDA WORKPLAN for: July 2013 – June 2015										
Expected outputs	Activities	Input			Funding		Responsible person(s)		Timetable	
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
Promote the use of SLM in Central Asia				ICARDA and National Partners		available				

Prepared by: Feras Ziadat

Total: US \$ US \$

ICIMOD WORKPLAN for: July 2013 – June 2015										
Expected outputs	Activities	Input			Funding		Responsible person(s)		Timetable	
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
NEPCAT fact sheet-2 data base	Data base entry of NEPCAT fact sheet-2	1	2	ICIMOD			2000	Madhav and Intern	Madhav	January-June 2014
MYACAT factsheet	Compile and edit case studies collected from the various contributors and publish the MYACAT fact sheet	1	2	ICIMOD & contributors			20000	Madhav and MYACAT team		2014-2015
Task force products	Testing of CC module	1	.5	ICIMOD & Swiss student			1000		Madhav	Oct-Nov 2013
HIMCAT extranet maintained	Continue HIMCAT extranet	1	.25	ICIMOD			1000	Madhav, Deependra	Madhav	July 2014
HIMCAT country networks strengthened	Provide support to HIMCAT partners on a demand basis	1	.5	ICIMOD			1000	Madhav	Madhav	regular(2013-2015)
WOCAT trainings in HIMCAT region	WOCAT training in Regional member countries on a demand basis	1	1	ICIMOD, regional partners			10000	Madhav		2014-2015
Joint SLM project implementation	Proposal for funding project and implementation			WOCATand ICIMOD			?	WOCAT ICIMOD with partners		July 2013 to June 2015

Prepared by: Madhav Dhakal

Total: US \$ 35,000

Philippines WORKPLAN for: July 2013 – June 2015										
Expected outputs	Activities	Input				Estimated Funding US\$		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
WOCAT Promotion Materials	Presentation of WOCAT Materials to conferences and seminars	4	3	BSWM in partnership with PHILCAT members	SWC Presentation Materials, Office Supplies, & Computer	500	1,000	S. M. Contreras	S. M. Contreras	Aug – Sep 2013
	Seminar on SLM including knowledge management	4	1	BSWM	Presentation materials, office supplies & computer	1,500	1,500	S. M. Contreras & T. Sandoval	S. M. Contreras	Jun 2013
SWC and Training Seminars	Farmers training in support to the establishment of Soil Conservation Guided Farm Project in Sloping Lands planted to corn	4	5	BSWM in partnership with LGUs, and DA-RFUs and NGOs	IEC/training materials; farm inputs for FFS; computer and LCD projector;	2,000	2,000	S. M. Contreras, and J. Manguera	S. M. Contreras	Jul 2013 – June 2014
	NAP alignment process			BSWM	Computer	30,000	30,000	Dir. S. Q. Tejada	Dir. S. Q. Tejada	Jun 2013 – Jun 2014
Mainstreaming and scaling up of SLM	Participate in the implementation of the Global project "Decision support for mainstreaming and scaling up SLM"			BSWM and partner agencies		45,000	45,000	Rodel Carating	Rodel Carating	Jun 2014 Jun 2015
Monitor and assess status of PHILCAT activities	Conduct quarterly meeting of PHILCAT	18 members	5 meetings	PHILCAT	Office supplies; Reports on activities	1,500	1,200	S.M. Contreras & PHILCAT Secretariat	S. M. Contreras	Jul 2013 – Jun 2015

Prepared by: Samuel M. Contreras (BSWM)

Total: US \$ 80,500 US \$ 80,700

Yemen WORKPLAN for: July 2013 – June 2015										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
Flow up of WOCAT Activities in concerning institutions + intensive training	Meetings with participants of last workshops	32	Per 3	7	Stationary, transportation, audios, DSA, data show, refreshments	1148	2950	RNRRC	FAORNA	2 meetings in 2014 & 1 meeting in 2015
Documentation of local knowledges (Qt, Qa, Qm)	Documentation of 20 approaches, technologies and mapping in different ecological regions in Yemen	12	12	7	Stationary, transportation, GPS, s, digital cameras, DSA	3000	12500	RNRRC, concerned institutions	FAORNA	Feb. 2014-Feb. 2015
Providing of Yemeni techniques in the WOCAT's website	Data analysis and interring to WOCAT database	7	2	7	Incentives for 6 persons	1000	3000	RNRRC, concerned institutions	FAORNA	March-April 2015
Writing the text	Preparation the report	3	1	1	-	300	500	RNRRC	FAORNA	May 2015
The important of WOCAT for SLM and Displaying the output of activities	Conducting thematic workshop for decision making in concerned institutions, NGO.s, researchers and academic specialists	22	1	12	Stationary, transportation, audios, DSA, data show, refreshments	500	2500	RNRRC	FAORNA	June 2015

Prepared by: Ahmed Al-Galal Total: US \$ 5948 US \$ 21450

Ethiopia WORKPLAN for: 2014-2015										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
Training on SLM approaches and Technologies	Training on SLM approaches and Technologies(Watershed and Land use Plan)	200 Experts/year		USAID			110,000 USD			15 days
Documentation of 1QA	Documentation of PFM (Participatory forest management Approach)			WOCAT International			2,000 USD			1 Month
Documentation of 1QA	1 to 5 watershed Development mass mobilization Approach						2,000 USD			1 Month
Documentation of 1QA	Kebele Parcel based participatory Land use planning approach						2,000 USD			1 Month
2 new wocat Techenologies	Documentation of PFM (Participatory forest management Approach)			WOCAT International			3,000 USD			1 Month
1 Regulation	Incorporate wocat Knowledge In Land Regulation			USAID			3,000 USD			1 month

Prepared by: Frehiwot Desta

Total: US \$ 122,000

Kenya WORKPLAN for: July 2013 – June 2015										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
Validated DST-MATSIM Tool.	Collecting field/Biophysical information from completely different farmers per AEZ	4	3	JKUAT/KARI	Transport RAs (3) ROs (1) Stationery Instruments (Camera, GPS, Clinometers)		Transport for 20 days @ Ksh3000 (Ksh.60000) RAs (20 days @ Ksh.1000) (Ksh.60000) RO @ Ksh3000 (Ksh.60000)		Kahiga/ Supervisor	3 Months
27 QTs in the Global WOCAT database	Enhancing the quality of QTs and entering the data in the global database	2	2	JKUAT/KARI	Internet/communication RAs (2) RO (1)		RAs (30days) Ksh.60000		Kahiga/ Supervisor	2 Months
DST-MATSIM Tool Technical manual	Finalizing the DST-MATSIM Technical Manual. Publishing and reviewing the Manual	4 1	2 1	JKUAT/KARI	RA (2) RO (1) Publisher (1)		DSA for RAs (15 days) Ksh.30000 Publisher and reviewer Ksh.30000		Kahiga/ Supervisor	3 Months
SLMs Leaflets/brochures	Leaflet for all QTs documented Write shop (editing) Publishing of Leaflets	7	2	JKUAT/KARI	ROs (4), editing RAs (2) Publisher (1)		Write shop for 3 days ROs (Ksh.36000) and RAs (Ksh.6000) Hiring a meeting room (Ksh15000) Publisher, 30 SLMs (Ksh.30000)		Kahiga/ Supervisor	2 months
Exhibitions/fairs	Nairobi and Nyeri agricultural show	2	N/A	JKUAT/KARI	RAs (2) Printing of brochures and daily subsistence during the		Ksh.3000 (Photocopying) DSA for 2 RAs (Ksh.20000)		Kahiga/ Supervisor	4 times 5 days *4

					exhibitions					
QTs in both Global WOCAT and DST-MATSIM Tool database	Documenting more QTs from the upper Tana and including them in both global and DST-MATSIM Tool database	4	12	JKUAT/KARI	RAs (3) ROs (1)		Lumpsum (Ksh.277310)		Kahiga/ Supervisor	12 months
SLM Handbook	Publishing a handbook on good SLM practices for enhancing ecosystem services and climate change adaptation for the upper Tana catchment basing on my experiences on WOCAT methodology	5	12	JKUAT/KARI	ROs(4) RAs (1) Publisher		Lumpsum (Ksh.180000)			

Prepared by: Kahiga Paul Mathaiya

Total: US \$ 9,969 (ksh. 867,310)

South Africa WORKPLAN for: July 2013 – June 2015										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
Framework agreement	Discussions with Department of Agriculture, Forestry and Fisheries to sign partnership agreement with WOCAT International and make our WOCAT involvement part of the formal NRM Structures within the department									
Implementation of WOCAT in South Africa	Meetings with potential stakeholders to implement WOCAT in South Africa									
QM data collection	Continue with development of Decision Support System and products for informed decision making based on WOCAT/LADA QM data collected during LADA National									
Training and development	Involvement in QT, QA, QM Training and further development as requested by different stakeholders									

Prepared by: Lehman Lindeque

Total:

Chile (FAO RLC) WORKPLAN for: July 2013 – June 2015										
Expected outputs	Activities	Input				Funding		Responsible person(s)		Timetable
		Person x months		Institution	Materials / equipment	Available	Required		Commitment by	
Publication		1	4	FAO		3,000		B. Kiersch - M. González - A. García		December 2013
Translation of WOCAT 2.0 + Guidelines to english		1	1	FAO			1,000	B. Kiersch		March 2014
WOCAT 2.0 in html to diffusion purposes		2	1	FAO		2,000		B. Kiersch - Núcleo de Capacitación		October 2013
Web page to diffusion		1	1	FAO				M. González		October 2013
Internal RLC seminar on WOCAT 2.0		1	1	FAO				M. González		November 2013
Workshop to discuss and adjust WOCAT 2.0 methodology		1	6	FAO			35,000 + 7,000 (consultants)	B. Kiersch - M. González		March - June 2014
Difussion activities		2	6	FAO			3,000 (travel, materials) + 7,000 (consultants)	B. Kiersch - M. González		May - September 2014

Prepared by: Kahiga Paul Mathaiya

Total: US \$ 5,000 US \$ 53,000

ANNEX 4: LIST OF PARTICIPANTS 2013

1. List of participants at 16th WWSM

Last name	First name	Institution	Address	Country	email
Beckedahl	Heinz	UKZN	P/Bag X01, Pietermaritzburg	South Africa	hbeck@ukzn.ac.za
Beukes	Danie	ARC-ISCW	P/Bag X79, _0001 Pretoria	South Africa	djbeukes@arc.agric.za
Bhangade	Sharad	Watershed Organisation Trust (WOTR)	Watershed Organisation Trust (WOTR), The Forum, 2nd Floor, Padmavati corner, Pune Satara, Road, 411009 Pune	India	sharad.bhangade@wotr.org.in
Bunning	Sally	FAO	Viale delle Terme di Caracalla, 00153 Rome	Italy	Sally.Bunning@fao.org
Candelori	Massimo	UNCCD	Bonn	Germany	MCandelori@unccd.int
Contreras	Samuel	Bureau of Soils and Water Management	SRDC Bldg. Elliptical Road cor. Visayas Aven., Diliman, Quezon City , Meycauayan City	Philippines	sammycontreras@yahoo.com
Cox	David	Institute of Natural Resources / Afromaison	P.O. Box 100396, 3209 Pietermaritzburg	South Africa	DCox@inr.org.za
Daemane	Ernest	South African National Parks	PO Box 110040, Hadison Park, 8306 Kimberley	South Africa	ernest.daemane@sanparks.org
Danano	Daniel	FAO	2223 Cairo	Egypt	daniel.dale@fao.org
Dema	Yeshey	National Soil Services Centre (NSSC)	Thimpu	Bhutan	yeshey.dema@gmail.com
Dhakal	Madhav	ICIMOD	P.O. Box 3226, Kathmandu	Nepal	mdhakal@icimod.org
Dorji	Tsheten	National Soil Services Centre (NSSC)	Thimpu	Bhutan	tshetendorji08@gmail.com
Guinand	Yves	SDC Swiss Agency for Development and Cooperation	Freiburgstr. 130, 3003 Bern	Switzerland	yves.guinand@deza.admin.ch

Gurung	Hari	Helvetas Swiss Intercooperation	Helvetas Swiss Intercooperation Nepal, P O Box 688, Dhobighat-3, Lalitpur, Kathmandu	Nepal	hari.gurung@helvetas.org.np
Harari	Nicole	CDE Centre for Development and Environment	Hallerstrasse 10, 3012 Bern	Switzerland	nicole.harari@cde.unibe.ch
Harding	Mike				
Jagre	FREHIWOT DESTA	Not a member of an institution	SNNPR NATURAL RESOURCE and ENVIRONMENTAL PROTECTION AUTHORITYawassa p.o.box-80, Awassa	Ethiopia	fdesta54@yahoo.com
Jathar	Girish	Watershed Organisation Trust (WOTR)	Watershed Organisation Trust (WOTR), The Forum, 2nd Floor, Padmavati corner, Pune Satara, Road, 411009 Pune	India	girish.jathar@wotr.org.in
Jendoubi	Donia	National Institute of Agricultural Sciences of Tunisia	9 street Lavienne, Bellevue, 1009 Tunis	Tunisia	jendoubi.donia@yahoo.com
Kahiga	Paul	Jomo Kenyatta University	00300 Nairobi	Kenya	mathaiya_kahiga@yahoo.co.uk
Lesesa	Mpho	Provincial Adminstration	P.O. Box 158 Mount Fletcher 4770, 4770 Matatiele	South Africa	Mpho.lesesa@ gmail.com
Lindeque	Lehman	Department of Agriculture, Forestry and Fisheries	Private Bag X120, _0001 Pretoria	South Africa	LehmanL@daff.gov.za
Liniger	Hanspeter	CDE Centre for Development and Environment	Hallerstrasse 10, 3012 Bern	Switzerland	hanspeter.liniger@cde.unibe.ch
Lo	Ndene	Institut National de PÃ©dologie	10709 Dakar	Senegal	ndenelo@yahoo.fr
Lötter	Lianda	ARC-ISCW	600 Belvedere Street, _0001 Pretoria	South Africa	LotterL@arc.agric.za
Mahlangu	Bafana	Department of Agriculture, (Devision of soil conservation)	Agric Engineering Offices, Friedenhein road, 1200 Nelspruit	South Africa	mahlangubp@gmail.com
Makhoba	Phumlani	Provincial Adminstration	P.O. Box 158 Mount Fletcher 4770, 4770 Matatiele	South Africa	lamajoko@gmail.com
Mekdaschi Studer	Rima	CDE Centre for Development and Environment	Hallerstrasse 10, 3012 Bern	Switzerland	rima.mekdaschi_studer@cde.unibe.ch
Mityakova	Natalia	GIZ	96a Kievskaya str., 720040 Bishkek	Kyrgyzstan	Natalia.mitiakova@giz.de

Naidoo	Samantha	Kaytech	11 Livingstone Road, 3600 Durban	South Africa	samantha@kaytech.co.za
Nkosinathi Emmanuel	Mbende	RSA Government	Private Bag X 0040, Bisho, 5605 Bisho	South Africa	nembende@yahoo.com
Pinkie	Mmatshwene	Gauteng Department of Agriculture and Rural Development	68 Diamond Corner Eloff & Market Street, 2000 Johannesburg	South Africa	Pinkie.Tsimane@gauteng
Pirola Ogoa	Ethel	Antea Group	Poortakkerstraat 41, 9051 Gent	Belgium	ethel.pirola@anteagroup.com
Pretorius	Carin	CEIT Development Namibia	35 Eulenstreet, Windhoek	Namibia	carin@ceit.cc
Providoli	Isabelle	CDE Centre for Development and Environment	Hallerstrasse 10, 3012 Bern	Switzerland	isabelle.providoli@cde.unibe.ch
Rioux	Janie	FAO	Viale delle Terme di Caracalla, 00153 Rome	Italy	Janie.Rioux@fao.org
Sokhna FALL	Ndeye	Institut National de PÃ©dologie	bp 10709 dakar, 221 DAKAR	Senegal	ndeyesonifall@yahoo.fr
SONG	Zengming	State Forestry Administration, PRC	No. 18, Blk. 5, Hepingli South Street, 100013 Beijing	China	songzmgef@126.com
Swift	Melinda	Sustainable Resource Management	P.O. 8769, 2000 Johannesburg	South Africa	Melinda.swift@gauteng.gov.za
Van Lynden	Godert	ISRIC-World Soil Information	P.O. Box 353, 6700 AJ Wageningen	Netherlands	godert.vanlynden@wur.nl
Wangdi	Tashi	National Soil Services Centre (NSSC)	P.O.Box. No. 907, Simtokha, Thimpu	Bhutan	tashwua@gmail.com
Ziadat	Feras	ICARDA	Tel Hadya, 5466 Aleppo	Syria	f.ziadat@cgiar.org

2. List of participants only at Share Faire and/or Field day

Last name	First name	Institution	Address	Country	email
Baloyi	Happy	Gauteng Department of Agriculture and Rural Development	P.O. Box 8769, 2000 Johannesburg	South Africa	Happy.Baloyi@gauteng.gov.za
Bosaga	Lydia	Department of Agriculture, Forestry and Fisheries		South Africa	
Chiappini Carpena	Pietro	Self Help Africa	Westgate House, SY1 1QU Shrewsbury	Great Britain	pietro.chiappinicarpena@selfhelpafrica.net
Cimpoye	Ntsoane			South Africa	
Croxton	Simon	OneWorld Sustainable Investments	4 Church Square, 4 Spin Street, 8000 Cape Town	South Africa	Simon@oneworldgroup.co.za
den Dulk	Harmen	Sustainable Resource Management	P.O. 8769, 2000 Johannesburg	South Africa	Harmen.dendulk@gauteng.gov.za
De Klerk	Nic	Sustainable Resource Management	Private bag x 1099, 1400 Germiston	South Africa	Nicolaas.deklerk@gauteng.gov.za
Dongi	Passmore	Walter Sisulu University	NMD Campus, Mthatha	South Africa	passmoredongi@gmail.com
Finger	Alexander	Martin-Luther-University Halle-Wittenberg	Weinbergweg 10, 6099 Halle (Saale)	Germany	alexander.finger@biodidaktik.uni-halle.de
Kellner	Klaus	PU for CHE	North West University, 2520 Potchefstroom	South Africa	Klaus.Kellner@nwu.ac.za
Khumalo	Portia	Department of Agriculture, Forestry and Fisheries		South Africa	
Lindemann	Hein	Department of Agriculture, Forestry and Fisheries	DAFF: LUSM Private Bag x120, _0001 Pretoria	South Africa	HeinL@daff.gov.za
Lulama	Sombalo	AGRICULTURAL RESEARCH COUNCIL	PRIVATE BAG X 79 , PRETORIA	South Africa	lulama@arc.agric.za
Mabadzhe	Rofhiwa	Gauteng Department of Agriculture and Rural Development officials		South Africa	
Mamphoo	Ramakgwalo	Department of Agriculture, Forestry and Fisheries		South Africa	

Maphumulo	Petros	Maphumulo Farming and Consulting	PO Box 5513, Empangeni, 3880 Empangeni	South Africa	Maphumulo@mweb.co.za
Maphupha	Lesley	Gauteng Department of Agriculture and Rural Development officials		South Africa	
Marubini	Mashudu	Department of Agriculture, Forestry and Fisheries		South Africa	
Marz	Michael	Martin-Luther-University Halle-Wittenberg	Von-Seckendorff-Platz 3-4, 6120 Halle (Saale)	Germany	michael.marz@geo.uni-halle.de
Matsau	Patric	Gautang, DOA		South Africa	
Mavis	Makobe		PO Box8769, 2000 Johannesburg	South Africa	mavis.makobe@gauteng.gov.za
Milne	Grant	World Bank Group	1818 H Street NW, Washington DC	USA	gmilne@worldbank.org
Mndzebele	Buhlebelive	Tshwane University of Technology	House 8, Sunric Gardens, 767 Arcadia Street, Pretoria	South Africa	buhlebelivemndzebele@yahoo.co.uk
Mnotoza	Nandi	Gauteng Department of Agriculture and Rural Development	68 Eloff Street, Diamond Cnr. Building, JHB, 2000 Johannesburg	South Africa	Nandipa.Mnotoza@gauteng.gov.za
Nkomo	S'phumelele Lucky	UKZN	3201 Pietermaritzburg	South Africa	209534123@stu.ukzn.ac.za
Nöffke	Roley	Hydromulch (Pty) Ltd		South Africa	roley@hydromulch.co.za
Nofemela	Bentley	Gauteng Department of Agriculture and Rural Development officials		South Africa	
Nolefe	Evelyn	Gauteng Department of Agriculture and Rural Development officials		South Africa	
Oettle	Noel	Environmental Monitoring Group	Box 350, 8180 Nieuwoudtville	South Africa	dryland@global.co.za
Peterson	Garry	Pedology	Private Bag X79, Pretoria	South Africa	garry@arc.agric.za
Petterson	Daniel				

Pretorious	Dirk			South Africa	
Pwiti	Fadzai	University of KwaZulu-Natal	3201 Pietermaritzburg	South Africa	carolpwiti@yahoo.com
Riggs	Ivan	Department of Agriculture, Forestry and Fisheries	DAFF: LUSM Private Bag x120, 0001 Pretoria	South Africa	IvanR@daff.gov.za
Sangweni	Isaac	Self Help Africa	Box 313, Karonga, Karonga	Malawi	isaac.sangweni@selfhelpafrica.org
Scholes	Mary	University of the Witwatersrand	P Bag 3, Wits, 2050 Johannesburg	South Africa	Mary.scholes@wits.ac.za
Schumann	Bonnie	Endangered Wildlife Trust	P.O. 172, 6985 Loxton	South Africa	bonnies@ewt.org.za
Seutloali	Khoboso	University of kwaZulu-Natal	University of KwaZulu-Natal, Geography Department, P/Bag X01 , 3209 Scottsville	South Africa	kseutloali@yahoo.com
Siyaya	Jabulani	Gauteng Department of Agriculture and Rural Development	P.O. Box 8769, 2000 Johannesburg	South Africa	Jabulani.siyaya@gauteng.gov.za
Smalberger	Suzette	Omnia Fertilizer	Laksmanstraat 7, Potchefstroom, 2531, 2531 Potchefstroom	South Africa	ssmalberger@omnia.co.za
Smith	Chris	LandCare, Agriculture: FS	P/Bag X01, 9360 Glen	South Africa	smith@fs.agric.za
Smith	Hendrik	Grain SA	PO Box 74087, Lynwood Ridge, 0040 Pretoria	South Africa	Hendrik.smith@grainsa.co.za
Snyman	Corlia		227 Trade mark ave, 2162 Johannesburg	South Africa	corlia.snyman@maccaferri.co.za
Steyn	Danie	AgriSkills Transfer	PO Box 17074, Lyttelton, 0140, 140 Pretoria	South Africa	danie@agriskills.net
Steyn	Francis			South Africa	
Strauss	Sybrand Albertus	AGRICULTURE Department	P/BAG X01, GLEN, 9360, Bloemfontein	South Africa	brandus@fs.agric.za
Swift	Melinda	Sustainable Resource Management	P.O. 8769, 2000 Johannesburg	South Africa	Melinda.swift@gauteng.gov.za

Tshukalange	Bndget	Department of Agriculture, Forestry and Fisheries	South Africa	
Tvevon	Loulye	Private company	South Africa	
Van der Merwe	Winnie	Kaytech, South Africa	52 Harris ave, Isandovale, Johannesburg	South Africa winnie@kaytech.co.za
Van Nieuwenhuizen	Danie			
Yousuph	Shaamshad	Gauteng Department of Agriculture and Rural Development	South Africa	

ANNEX 5: CONTENT CD-ROM

1. Proceedings: Proceedings16th WWSM.pdf

2. Photos

3. Presentations

3.1. WOCAT Share Fair

OPENING

Opening_Share Fair_HP Liniger_WOCAT_Achievements&Challenges for DS.pdf

POSTER MARKET

- 1_South Africa_DJ Beukes_ARC-ISCW.pdf
- 2_South Africa_DJ Beukes_ARC-ISCW.pdf
- 3_Philippines_Samuel Contreras_BSWM.pdf
- 4_South Africa_Melinda Swift_GDARD.pdf
- 5_Germany_Noel Oetté_University of Hambourg.pdf
- 6_South Africa_Bonnie Schumann_EWT-DCP.pdf
- 7_Italy_Janie Rioux_FAO.pdf
- 8_Italy_Sally Bunning_FAO.pdf
- 9_Switzerland_Rima Mekdaschi Studer_WOCAT.pdf
- 10_Switzerland_Nicole Harari_WOCAT.pdf
- 11_Germany_Michael Marz_University of Halle.pdf
- 12_South Africa_S'phumelde Lucky Nkamo_UKZN.pdf

TOPIC 1

Keynote presentation 1

Mary Scholes_University of Witwatersrand_South Africa.pdf

Input presentations 1

- 1_Sharad Bangade_WOTR_India.pdf
- 2_Gurung Hari_Helvetas_Nepal.pdf
- 3_Hendrik Smith_Grain SA_South Africa.pdf
- 4_Garry Paterson_ARC-ISCW_South Africa.pdf
- 5_Pietro Chiappini Carpena_Self Help Africa_Great Britain.pdf
- 6_Frehiwot Desta Jagre_SNNPR_Ethiopia.pdf
- 7_Roley Noffke_Hydromulch_South Africa.pdf
- 8_Girish Jathar_WOTR_India.pdf
- 9_Daniel Danano_FAO RNE_Egypt.pdf

TOPIC 2

Keynote presentation 2

Hanspeter Liniger_CDE_DS for Drr watershed planning.pdf

Input presentations 2

- 1_Heinz Beckendal_UKZN_South Africa.pdf
- 2_Klaus Kellner_North West University_South Africa.pdf
- 3_Sally Bunning_FAO_Italy.pdf
- 4_Madhav Dhakal_ICIMOD_Nepal.pdf
- 5_Feras Ziadat et al_ICARDA_Jordan.pdf
- 6_Natalia Mitiakova_GIZ_kyrgyzstan.pdf
- 7_Zengming Song_State Forestry Administration PRC_China.pdf
- 8_Simon Croxton_OneWorld Sustainable Investments_South Africa.pdf
- 9_Francis Steyn_Western Cape Department of Agriculture_South Africa.pdf

TOPIC 3

Keynote presentations 3

Carin Pretorius_CEIT Development_Namibia.pdf
Dirk Pretorius_Mobile technologies_South Africa.pdf

Input presentations 3

- 1_Paul Kahiga_Jomo Kenyatta University_Kenya.pdf
- 2_Tashi Wangdi_National Soil Services Centre_Bhutan.pdf
- 3_Danie Steyn_AgriSkills_South Africa.pdf
- 4_Nicole Harari_WOCAT_Switzerland.pdf

TOPIC 4

Success Café – Group Work

Group work_success café.pdf

CLOSING

Closing_Share Fair_HP Liniger.pdf

3.2_16th WWSM

<p>DAY 1: THURSDAY_30.5</p> <p>1_Summary Share Fair Na</p> <p>2_Topic discussion</p> <ul style="list-style-type: none"> 1_Lindeque Lehmann_WOCAT_DS based on mapping.pdf 2_Janie Rioux_FAO_ Adaptation of WOCAT tools to climate resilience.pdf 3_Hanspeter Liniger_DS for DRR planning.pdf <p>New WOCAT set-up Isabelle Providoli_WOCAT_Update on new WOCAT set-up.pdf</p> <p>DAY 2: FRIDAY_31.5</p> <p>1_National progress report UNCCD_progress report.pdf</p> <p>Africa</p> <ul style="list-style-type: none"> 1_Ethiopia -> na 2_Kenya_progress poster.pdf 3_Niger -> na 4_SENCAT_progress poster.pdf 5_South Africa_Way forward.pdf 6_Tunisia -> na <p>Asia</p> <ul style="list-style-type: none"> 1_Afghanistan -> na 2_Bhutan -> na 3_CALCIM progress poster.pdf 4_China progress poster.pdf 5_ICIMOD progress poster.pdf 6_India -> na 7_Philippines -> na 8_Yemen -> na 9_ICARDA -> na <p>New initiatives</p> <ul style="list-style-type: none"> 1_AfroMaison_progress report.pdf 2_FAO RLC progress poster.pdf 3_Yemen_progress report.pdf <p>2_Global progress report</p> <ul style="list-style-type: none"> 1_CDE_Global progress report.pdf 2_FAO_Global progress report.pdf 3_FAO_SLM Survey.pdf 4_ISRIC_Global progress report.pdf <p>New WOCAT set-up Isabelle Providoli_WOCAT_Further discussion on new WOCAT set-up.pdf</p>	<p>DAY 3: SATURDAY_1.6</p> <p>1_Steering meeting</p> <ul style="list-style-type: none"> 1_WOCAT Steering Meeting 2013.pdf 2_CDE.pdf 3_FAO.pdf 4_ICARDA.pdf 5_ISRIC.pdf 6_UNCCD.pdf <p>2_Workshop regional WOCAT initiatives WOCAT Workshop_saturday.pdf</p>
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